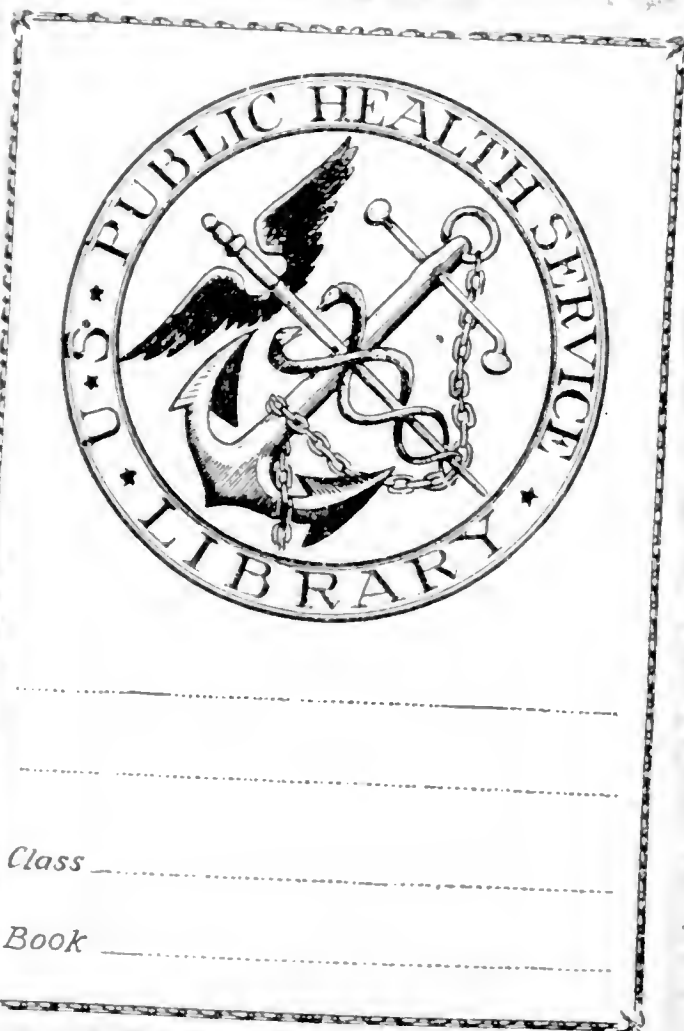


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ELEVENTH ANNUAL REPORT
OF THE
STATE
BOARD OF HEALTH
OF FLORIDA.

JACKSONVILLE, MARCH 15, 1900.

TALLAHASSEE, FLA.
TALLAHASSEEAN BOOK AND JOB OFFICE.
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OFFICERS AND MEMBERS
OF THE
STATE BOARD OF HEALTH
OF FLORIDA.

HON. W. B. HENDERSON, President, Tampa, Florida.

HON. D. T. GEROW, Jacksonville, Florida.

DR. HORACE L. SIMPSON, Pensacola, Florida.

DR. JOSEPH Y. PORTER, State Health Officer and Secretary,
Key West, Florida.

Office of the Board, JACKSONVILLE, FLA.

Letter of Transmittal.

JACKSONVILLE, FLA., March 24, 1900.

*To the Honorable Wm. D. Bloxham, Governor of Florida,
Tallahassee, Fla.:*

SIR—I have the honor to respectfully transmit to you the report of the State Health Officer and Secretary of the State Board of Health for the year 1899. You will find therein an itemized statement of expenditures for the year, as called for by the Statute, and also a narrative of sanitary events of the year. These matters are so clearly set forth by Dr. Porter, and the important points dwelt upon, that there does not seem to be anything that I can say which would emphasize more perfectly the conclusions deduced. I would add, however, that the report has the endorsement and acceptance of myself and colleagues.

Very respectfully,

WM. B. HENDERSON,
President State Board of Health.

State Health Officer's Report.

JACKSONVILLE, FLA., March 15, 1900.

*To the President and Members of the State Board of Health
of Florida:*

GENTLEMEN—In presenting to you the annual report of the transactions of the executive officer of the State Board of Health for the year 1899, a slight deviation is made from the usual arrangement of subjects, especially those relating to the general health of the State, in order that the sanitary agents of the Board in the several counties may themselves express to you the health situation in those districts over which they have been appointed to preside.

ALACHUA COUNTY.

J. H. Hodges, M. D.

During the past year Alachua County has experienced several outbreaks of smallpox. The points infected have been Waldo, Rochelle, Newberry, Alachua, Gainesville, LaCrosse and High Springs. Vigorous measures were adopted in each case as soon as the disease was reported, and there have not been more than a few cases at any of these places. *In no instance did a new case develop after the health authorities took charge.* Free vaccination, through the agency of the State Board of Health, has been general, and the country would be in little danger from this disease but for the migratory character of the negroes. The phosphate mines and the turpentine camps are the places most exposed to danger from this source. In Gainesville, during November, there was a small epidemic of diphtheria—eight cases; one death—necessitating the closing of the public school for a few days. Rigid isolation and thorough fumigation with formaldehyde was carried out in every case, and, at this time, the town is entirely free from the disease. The diphtheria anti-toxin procured from the office of the State Board of Health was promptly used in all the cases. In some the membrane separated from

the throat the next day after the anti-toxin was given. The presence of yellow fever at Key West and Miami during the summer did not disturb the equilibrium of our people in the least, except through sympathy for the stricken localities. Alachua county, in common with the rest of Florida, has perfect confidence in the efficiency of the State Board of Health, and the people felt perfectly secure in the belief that the disease would be confined to the localities already infected. At the close of the year our county remains free from all infectious or contagious diseases.

BRADFORD COUNTY.

E. L. Stewart, M. D.

The sanitary condition, generally speaking, was up to the average. In some villages conditions have much changed during the year. In the town of Lake Butler a new railroad has resulted in bringing in a lot of new people, both black and white. The same holds with other points in the county. No case of smallpox has existed in the county during the last three-quarters of the year. No other contagious or infectious disease has visited the county, except measles and mumps and the usual number of typhoid cases. There has been, of course, much malaria, of more or less severity, very widely distributed over the county. Vaccination has been very thorough, every physician in the county doing what he could to use the vaccine furnished free by the State Board of Health to every one. I estimate that nine-tenths of the people are now well protected.

BREVARD COUNTY.

W. L. Hughlett, M. D.

I take pleasure in reporting a very satisfactory state of health for the county during the entire year. There has been no epidemic of any kind. In the latter part of 1898 a negro appeared at Fort Pierce with a mild, though well-marked, case of smallpox. The trouble was promptly recognized by the local physician, Dr. C. P. Platts, the man isolated, and the people of the town generally vaccinated. This case recovered in due time, and there was no spread of the infection. I embraced this opportunity to push vaccination, which I had for years advocated, and I think that within two or three months from the appearance of the case, that at least fifty per cent. of our population were vaccinated or re-vaccinated. The virus giving the best results was that furnished the agent from the

office of the State Board of Health, put up in sealed tubes by Parke, Davis & Company. The use of this was followed in some cases by very sore arms. Whether or not these infections came directly from the virus, or from other infective causes is a matter worthy of investigation. A few cases of typhoid fever at Rockledge, in 1899, led to inquiry as to the possible cause. The milk and water supply seemed not chargeable as the source of disease. Attention was called to the very unsatisfactory condition of the sewer system of the tourist hotels. The attention of the several proprietors was called to this, and they were urged—as in their own behalf—to remedy these public nuisances. Only one, Mr. H. P. Shares, owner of the New Rockledge Hotel, complied with the suggestions of your agent, he extending the sewer pipe from his hotel some 200 feet into the river, into a good depth of water. The others declined to do anything; their sewers remain as heretofore, one discharging at the edge of the river, the other within thirty feet of the shore. This unsanitary arrangement gives the public, residents, and visitors as well, good cause for complaint. A number of complaints have been lodged with me in the matter of nuisances. These offenses being the throwing of spoiled fish into the river by various fish houses—or their employes—at Cocoa, Rockledge and Jensen, and of animals, dead and decomposing, allowed to remain in public places—complaints from Sebastian and Narrows. All of these matters have had the immediate attention of your agent, and were usually promptly remedied. The heavy rainfall in October, and the resulting large bodies of stagnant water were productive of some sickness. In Titusville there were a number of cases of chills and fever and some other malarial troubles. The town authorities, by advice of local physicians and your agent, have drained off the stagnant water, so that now there are no more cases of malaria, and the general health of the town is good. The death rate in the county this year must be very low; the birth rate about normal. This will be shown by your list of vital statistics. I have discouraged in all the towns the use of drinking water from shallow or surface wells, advising instead, filtered rain water, boiled water, or water from melted ice. Fortunately our people are furnished with good ice, and distilled water is to be had at very reasonable prices. In the prevention of zymotic diseases I have always advocated personal and public cleanliness. "Clean up, and keep clean" is our motto. There has been no yellow fever in this county, nor any suspicious case. Your request that I allude to the presence of yellow fever in Florida this year

and touch upon the prevailing public sentiment at the time, calls for a response. From the day that you officially declared the existence of yellow fever at Key West to the present writing there has existed the greatest apprehension. The sentiment of the public has been "that the quarantine was not as stringent against Key West as it should have been, and that the situation at Miami was badly handled." Confidence was largely restored when you went, the fever was not scattered all along the line of the East Coast railroad is much to your credit, though the people are disposed to consider that a Providential deliverance. It is generally considered unfortunate that in the presence of an epidemic of infectious disease—a public calamity—there should exist a difference of opinion and methods between the State and the national authority.

CITRUS COUNTY.

J. D. Bennett, M. D.

The health of Citrus county may be summed up as follows: Early in January measles were very prevalent, particularly in the west side of the county. Almost everyone who had not had a previous attack suffered. Many took it who claimed to have had it previously, and considered themselves immune. Many had a light seizure, and relapsed with a second attack. Very few escaped it who had not had a previous attack. It was mostly in a mild form, nearly all recovering in a week or two. Several cases were followed by pneumonia. Comparatively few cases were fatal. Mumps prevailed during the spring, mostly mild and without complication. Two cases of diphtheria were reported. Both recovered. In the spring smallpox was brought from Dunnellon, where it had prevailed all winter, but we were able to prevent its spread until July, when it was reported from a turpentine farm. There were eight or ten cases, but it was promptly isolated and controlled. A few other isolated cases occurred later in different parts of the county, but there was no general spread until some time in August, when it broke out in a turpentine camp at Citronelle and went through the camp. It was so mild that it was impossible to get the negroes to keep out of the way of it, as they did not fear it in the least, and but few of them would be vaccinated. On its first appearance most of the white people were vaccinated, and very few whites suffered. It spread through the camp and died out of itself. I do not believe there is an instance where a person who was successfully vaccinated took smallpox. This is certainly a big plea for vaccination. One white baby, who had never been vaccinated, took it; all

the rest had, and not one of them suffered, although all were exposed to it. The summer was generally healthy, with the usual exception of chills and fever, and a few cases of typhoid and dysentery, not severe. Along the eastern sections of the county there were several cases of hemorrhagic fevers, with an occasional death. Most of these were men from the phosphate mines. The sanitary condition of our villages is very fair, and improving. Wherever there is a public well, however, it is usually at the street crossing and is sure to be in an unsafe condition. The cows and horses are watered there, and the well soon becomes positively filthy. I am making every effort to teach our people better sanitation.

CLAY COUNTY.

Wm. Griffith, M. D.

The year just closing has been one of remarkable healthfulness for Clay county. We have had some malarial fevers along the rivers, but even then there have been fewer cases and of milder form than in former years. At West Toccoi last year and the year before they had a great deal of malaria in the camps. I found that they were using drinking water from shallow surface wells, and finally got the manager of the turpentine works to drive a deep well, fill up the others and more thoroughly drain the camp. The effect has been the restriction of the number of cases of fever by more than one-half. Orange Park has a bountiful supply of artesian water, and the sanitary condition of the town is good. There has been very little sickness of any kind there this year, except amongst the bridge gang working for the Plant System. They worked at the bridges across the small streams and marshes and camped in their cars at Orange Park, and while almost all of them had malarial fevers, it was not the fault of the sanitary conditions of the town. When the sanitary inspection was made in August, there was only one or two cases of sickness of any kind amongst the inhabitants. The town of Green Cove Springs, until this year, had done nothing toward sanitary improvements for five or six years. All the central part of the town is lower than near the river, and is dependant for drainage on a wooden box pipe, lying from three to twelve feet below the surface. This had decayed, and the earth had fallen in and completely filled it in a great many places. I tried last winter to get the repairs made, but was told that the town could do nothing on account of the lack of funds in the treasury. The taxes were not collected until late in the spring, and then the question was raised as to whether

it were better to risk doing the work in hot weather or chance the effects of poor drainage. I advised the council to do what work was necessary for safe drainage, which they did, covering the fresh earth with lime as fast as it was turned up. The subsequent increased healthfulness has proven the wisdom of their action. During the smallpox epidemic last spring we had a few cases in the extreme western part of the county. They were successfully handled by Dr. Stewart, agent for Bradford county. There is, I regret to say, only about twenty or twenty-five per cent. of the population of this county protected by vaccination. While the yellow fever was in the State there was never the least show of uneasiness concerning this place. We thought our town was in too good a sanitary condition for it to spread here. Then, too, the people here have such absolute confidence in the judgment and ability of the State Board of Health that they feel perfectly secure as long as it has the management of an epidemic.

COLUMBIA COUNTY.

W. R. Chalker, M. D.

The year just closing has been one of the dryest years for a long time, and naturally enough, we expected an increase of sickness from the excessive drought. During the summer months, there seemed to be a slight increase of fevers, especially the remittent type, but, take the year as a whole, I think there has been rather less of all types of fevers than in 1898. Bowel troubles have certainly been less prevalent. Measles and whooping cough of mild types made their appearance in January and continued with us here, in Lake City, two or three months; not many cases in all, and hardly enough to be termed an epidemic. We also had a few cases of mumps. The outlook of smallpox in Lake City, in December, 1898, continued on until about the middle of May. There were about fifty cases, including two cases at Watertown and three at Bass, which were brought to the pest house established here in the beginning of the epidemic, where all were guarded and taken care of. The houses from where the cases were found and removed were disinfected. In the last of June we had another outbreak (three cases) three miles south of Lake City, on a farm. The first case was that of a strange man, claiming to be from near Dunnellon. These were guarded in a small house on the farm. The next trouble of this kind was in September, at Columbia. A young negro came here from near Dunnellon, where he had been working for several months, developing smallpox in a few days after

reaching home. He was kept concealed until nearly well. From this case, twelve other cases developed, all now well. These cases were gathered up and kept in a house and guarded part of the time. Although there have been about seventy cases, there is no case in the county at this time that I am aware of. There have been no deaths and only one case in a white person. Vaccination has been general where the cases occurred. I think about 50 per cent. of the inhabitants of the county have been protected by vaccination. The general sentiment regarding vaccination is very much changed during the last year, and we don't have so much trouble in vaccinating. There was very little excitement over the outbreak of yellow fever at Key West and Miami. Our people seemed to think it was in good hands and would be well managed. Our leading citizens are of the opinion that the disposition to tamper with the State Board of Health, by the National Government, should meet with a decided protest.

DE SOTO COUNTY.

Edward Greene, M. D.

Your smallpox notices in the early part of the year were duly posted, and having been pretty well supplied with vaccine matter, I let the public know that I would vaccinate all who applied, free of charge. The offer met with but little attention until a rumor that smallpox had broken out at the turpentine camps, six miles east of Arcadia; this produced a considerable flurry in the county. I promptly investigated the matter and found the rumor unfounded. My statements allayed the fears of the community. But the scare aroused the people to the fact that it was safest to be vaccinated, and they came to my office in platoons, big, little, old and young, all anxious to be vaccinated. I accommodated them, following strictly the directions in regard to vaccinating with the sterilized vaccine matter furnished by the State Board of Health. There were no cases of smallpox in the county. As to yellow fever, our people never got scared until the first outbreak at Miami took place. Then the town council of Arcadia convened and resolved to guard by sentinels the approaches to the town. This was done over my protest. However, the sentinels were the next day withdrawn. Punta Gorda, in a spasm of fear, placed an inspector on the Florida Southern Railway train, and one or two passengers were put off the train by him when they failed to show satisfactorily where they came from. Upon authority from you, by wire, I forbid their putting off any more passengers, and the next day

the inspector was withdrawn. At the outbreak of yellow fever in Key West, I asked the Board of County Commissioners of this county to see that all unincorporated towns and villages in the county be placed in a proper sanitary condition, which was done under the supervision of the chairman of the board. The incorporated towns, Punta Gorda and Arcadia, attended to their own sanitary conditions in a satisfactory manner. Whooping cough and measles have been in evidence in some parts of the county, but the prevailing diseases, as I have reported from month to month, have been of malarial origin. So far as I can ascertain, there have been six cases of meningitis in the county, one adult, the balance children. All ended fatally.

DUVAL COUNTY.

State Health Officer's Report.

There is very little out of the ordinary to record in presenting a sanitary *resume* of this county for 1899. The general health attained the usual standard, though lagrippe was very prevalent during the winter and early spring, followed by the customary seasonal troubles of the spring and early summer. Occasional cases of diphtheria and scarlet fever occurred in Jacksonville; very few, however, terminating fatally, and never, or rarely, creating alarm, because of the systematic methods of the city sanitary force. Cases of smallpox continued to be imported from time to time, some eighty odd patients being treated at the Sand Hills Hospital. This institution was under the direct charge of the city health officer to whose admirable management due commendation should be given for the successful restriction of the disease. On the discovery of the first cases a "flurry" in vaccination ensued, it being estimated that not less than eight thousand persons were vaccinated during the ten days following. The disease appeared at Yulee, Mandarin, St. Nicholas, South Jacksonville and Pablo Beach. Its course at this latter point was summarily checked by the removal of the sick (nine) to the Sand Hills pest house at Jacksonville and the close quarantine of all exposed. At no period were any cases of smallpox treated within the city limits, each case as it was discovered being immediately removed to the pest house. The sanitary condition of the county was looked after by the County Commissioners—through their inspector—and the City Health Department exerted their usual vigilance in promoting the cleanliness of the metropolis and its environs.

ESCAMBIA COUNTY.

W. E. Anderson, M. D.

It is gratifying to note that throughout the past year the public health of this county has been exceptionally good. Measles and whooping cough prevailed to some extent, but were not marked by a heavy mortality. The prevalence of yellow fever at New Orleans, and at two or more points in the extreme southern portion of the State, failed to create any undue alarm or apprehension in the minds of our people, who are fast realizing that fear and panic are but poor weapons of defense, while with courage, confidence and sanitation, wonders may be performed. Two cases of varioloid—from separate sources of infection—have occurred in our midst during the past winter. The first on January 16th, in the person of a negro minstrel troupe, which came here from New Orleans, stopping at a number of towns on the Mississippi coast while en route. The patient was immediately removed to the pest house. The other members of the company, to the number of sixty, were vaccinated, or re-vaccinated, more accurately speaking, as all but about eight or ten had sufficient evidence of previous protection. The cars containing the clothing, bedding, tents, etc., after thorough disinfection, (performed on a side track of the L. & N. R. R., four miles north of Pensacola), were again occupied by the troupe, and placed under guard to prevent communication until such time as their passage through the State might not endanger the public health. The patient was released from the pest house after an imprisonment of twenty-one days, and rejoined his company. He had never been vaccinated. The second case occurred on February 9th, in the person of a resident of Pensacola, in nine days from the time of exposure to the infection, which was with certainty traced to clothing recently brought from Oklahoma Territory, where, according to reports from numerous and reliable sources, the disease is said to prevail to an alarming extent. Hence, prompt measures to prevent communication with the infected chamber were taken. It was not deemed advisable to remove the patient—primary vaccination performed on three of the tenants of the house and secondary vaccination on five others, a guard placed around the premises and every precaution, such as room-to-room disinfection of the building, etc., was immediately adopted. The patient, who had been successfully vaccinated eighteen years ago, was discharged on the sixteenth day after the appearance of the eruption, when the premises, bedding,

clothing, etc., were again disinfected. For the prompt recognition and report of these cases, the State Health authorities and general public are greatly indebted to Drs. Pierpont and McKinnon, under whose observation they first appeared. Vaccination is not commonly resorted to by our people, as it should be, though there seems to be no decided opposition to it. Apathy or indifference towards the measure may, however, result as disastrously as organized resistance. It is thought by many that the State school law upon this subject is very generally observed and is productive of much good. The appearance some weeks ago of epidemic influenza has somewhat unsettled the previous healthfulness of our people, but its fatalities have been confined almost entirely to the infirm and aged. Efforts looking towards improvement in our sanitary affairs, while not extensively made, are still noticeable in many quarters, and the hope is indulged that a new impetus may be given the good work in the near future.

FRANKLIN COUNTY.

J. D. Rush, M. D.

In making my annual report for the year 1899, it affords me much pleasure to state that the general sanitary and health conditions have been better than the previous year, notwithstanding the fact that we have had a large floating population which very naturally makes it more difficult to keep up the standard of good sanitary and health conditions. We have made some progress in sanitary work, such as drainage and shelling the streets, both of which are very essential to any town. During the months of January, February and March, we had an outbreak of variola, of a mild form. We had a total of about thirty cases during the year. Out of this number, ten were placed in quarantine from 10 to 15 days, followed by the usual methods of disinfecting and fumigating with bichloride of mercury and sulphur, and vaccinating those who were directly exposed. All made a good recovery and most of them in a very few days. During these months vaccination was pushed, so that about 60 per cent. of the population are more or less protected. Public sentiment regarding vaccination is not harmonious, and plainly shows that education on the benefits of such a practice must be encouraged. I am glad to state very few of our people become panicky on the outbreak of smallpox here and elsewhere, nor the report of yellow fever in Florida. I believe that the people in Florida, as a whole, have such implicit confidence in the State Board of Health as not to be easily alarmed.

GADSDEN COUNTY.

G. W. Lamar, M. D.

In writing a resume of the health and sanitary conditions of Quincy and Gadsden county during the past twelve months, would begin by saying that up to May everything moved on quietly and nicely, with little sickness of any kind, with the sanitary surroundings good. About May, a certain eruptive trouble appeared among the negroes, which was of rather suspicious character, but on careful examination by local physicians was declared nothing of importance. The trouble continuing for two or three weeks, with from 10 to 15 cases, it was thought best to have the State Health Officer or his assistant make an examination, which was done by Dr. J. L. Horsey, Assistant State Health Officer, who declared the trouble smallpox of a very mild type. Measures were at once instituted to stamp the dreaded disease out, a pest house was established, where, during the next three months, about one hundred cases were treated, eight of whom were white, and without a death. For quite awhile prior to smallpox making its appearance in Gadsden county, the State Board of Health had urged vaccination, which was performed by the physician without cost to the people, a great many availing themselves of the opportunity. When smallpox appeared in our midst the County Commissioners and Town Council immediately ordered compulsory vaccination, the former of all persons living within three miles of Quincy, the latter of all persons living within Quincy. Somewhere between three and five thousand persons, white and black, were thus protected against smallpox. The sanitary conditions of Quincy and county had been generally good, and during this trouble it was everything that could be desired. Your agent, having had occasion to make several house-to-house inspections, found nothing to complain of. Those in authority, both town and county, rendered every assistance, showing the thorough accord between them and the State Board of Health, which added greatly to the successful termination of this terrible disease. Immediately after the disappearance of the last case of smallpox, which occurred the latter part of August, fever of a continued type prevailed, and several cases of typhoid. The cause of typhoid has been a mystery. These cases were out in the country, and far apart. It is needless for me to speak of the regret expressed on all sides that our State should have been visited by yellow fever; at the same time there is satisfaction in knowing that the people feel that it was through no fault of the State Board of Health.

HAMILTON COUNTY.

J. E. Hanna, M. D.

Our sanitary conditions are fairly good. We have had no contagious or infectious disease in the county. We only had one case of smallpox, in the early spring, and that was so well isolated, that there was no spread. About 75 per cent. of our people have been vaccinated. Florida was so well protected from the invasion of yellow fever in 1897 and '98, that our citizens did not feel the least alarmed in this portion of the State this year, when it was reported as being in Key West, Port Tampa and Miami. Our people seem to have perfect confidence in the State Board of Health, and feel that they will be protected from such contagious diseases.

HERNANDO COUNTY.

S. Stringer, M. D.

In making a summary report of my agency of the State Board of Health in and for Hernando county, for the current year, it gives me pleasure to say that by prompt action taken to suppress epidemics in their inception, they have been curtailed to a great extent, and in instances of measles the epidemic was entirely suppressed, with perhaps less than a dozen cases. This was early last spring, when a few cases made their appearance after an excursion on the railroad up to Palatka and return. During the summer months, quite a number of sporadic cases of smallpox appeared in the county, but were promptly isolated. At one time, I feared an epidemic of the dreaded disease would occur at Fitzgerald, a railroad crossing, and a most favorable place for its dissemination, but by early and constant care and important assistance from the community, and vaccination, it was kept under control for perhaps a month, and finally disappeared, and has been seen no more in that particular place. In other places in the county, however, it was brought in and new points of distribution established from which it would have doubtless spread over the very favorable fields for rapid propagation found in the numerous turpentine camps, had not prompt action been taken to suppress it. Notwithstanding the vigilant efforts of the community of Brooksville, as well as your agent, who, on some occasions, would visit negroes several miles in the country, to see a supposed case, the dis-

ease did get a hold in the town, and for six weeks or two months your agent had to assume charge and establish a pest house in order to suppress it, after handling thirteen cases. I am prepared to say that since October 14th last, at which time the last case was dismissed and the pest house closed, not a case of this disease has occurred in the county. I have vaccinated over 700 persons in the county, and could have vaccinated many more had the operatives at the turpentine and phosphate camps permitted, the principal objection being loss of time during vaccine fever, etc. During the months of September and October there were several cases of severe fever among the operatives of the phosphate camps in this county. This fever came so suddenly and spread so rapidly with such agonizing symptoms as to create some alarm at first, as to its real character, but it grew to be, in the estimation of your agent, of malarial origin, and would yield only to persistent anti-malarial treatment. Very few cases were seen, save those among the phosphate camps. Some of these cases of fever were accompanied with excruciating pains in the small of the back and in the knee, vomiting, partial suppression of urine and itceroid skin, yet, with distinct intermission and chill. Operatives in the phosphate camps are liable to intense malarial poison during the summer, as the work is carried on in deep pits where the solar heat is intense and considerable moisture under feet while they are sending carload after carload up to be dumped out of the pit. I attribute these fevers to the inhalation of poisoned atmosphere in and around the newly excavated earth, and drinking, in many instances, unwholesome water. Fortunately, we never see yellow fever in this section, although, should a case occur here, I do not think it would spread through the community, as there is wanting that constitutional condition of atmosphere and surroundings favorable to its existence. In fact, we feel as great immunity to this dreaded disease as the city of Atlanta boasts of. In conclusion, allow me to congratulate your board for the sagacity of having an authorized agent in each county, supposed to be competent to discover and successfully compete with the various preventable contagious diseases occasionally introduced in the State, and to suppress them in their incipency. May I ask you, had not these agents been on the watch and taken immediate measures to arrest the spread of smallpox, what would have been the sanitary aspect of our fair State at this time, and who can estimate the financial injury resulting from such a supposed condition?

2 B H

JACKSON COUNTY.

Theo. P. West, M. D.

Jackson county is altogether an inland county, without any sea coast at all, and there are no towns located within its borders numbering over 1,500 inhabitants. It has a population, according to the last State census, of twenty-two thousand people, about ten thousand whites and about twelve thousand blacks. A very large majority of this population are engaged in agricultural pursuits. The health of the entire county during the year, from the month of January to the month of December, has been good, generally, at least it has been an average year in health compared to former years. In the first part of January smallpox made its appearance in the northern portion of the county, brought from the State of Alabama, and in several other parts of the county, at different times up to the month of April, aggregating in all about one hundred cases, with four deaths, including an infant of only a few days old. Nearly all the cases occurred among the black population and were of a mild type. The means employed for its suppression was the strictest isolation of all cases as they occurred, and the vaccination of every individual in the entire infected vicinity. In trying to prevent its spread, I found it a very difficult matter to control the disease on account of the disposition of the black people to conceal the disease, and also because of the migratory disposition of the negro race. The black population of the county more willingly consented to vaccination than did the whites; perhaps from the fact that they realized they were more liable to the disease than the whites on account of their mode of life. I do not think, however, that more than 15 or 20 per cent. of the population of the county are vaccinated. In some parts of the county, during the latter part of the summer months, there were a number of cases of intermittent and a few cases of continued fever, but not more than usually occurs that season of the year. Rubeola and pertussis have also been prevalent in several communities during the year, but not as an epidemic.

JEFFERSON COUNTY.

Theo. Turnbull, M. D.

It becomes my pleasant duty to report the sanitary condition of the town of Monticello, the villages throughout the county, and the county of Jefferson at large, very good. There are some cases of pneumonia through the county, but very little sickness otherwise. No contagious diseases prevail.

The sickness during the year just coming to a close has been of a malarial type, i. e., remittent and intermittent fevers, dysentery, etc., etc. Fewer cases of typhoid fever were reported the past summer than for several years previous. We had an outbreak of smallpox in March, only two cases, one white, male; one colored, female. The white case developed first. The house was vacated, isolated and guarded; so also was the colored patient. Both recovered. The town and community were very panicky for awhile, but the result was that the free vaccination was taken advantage of, and almost every woman, man and child were vaccinated. Your local representative freely distributed virus to the physicians in town and throughout the country, and for two weeks all the physicians were kept busy vaccinating, several hundred being vaccinated daily. The country people, both white and colored, would come in by the wagon load. The negroes called it "assassinated," "lacerated," "fascinated" and "mancipated." In ten days there were many sore arms among the boys and sore legs among the girls, but no other or more serious trouble, no doubt due to the purity and freshness of the vaccine virus, which I found perfectly reliable and effective; very, very few had to be *re-vaccinated*, and then they let their sleeves down before dry, which was no fault of the vaccine. The State Health Officer is to be commended for procuring such reliable virus. Our citizens do not fear the disease now, as the community is protected by vaccination. The prevalence of yellow fever at Key West and Miami is very much to be regretted, but an appreciative public are loud in their praise of the skilled way in which the epidemic was managed and controlled by our efficient State Board of Health, whose able counsel, vigilance and care of the public health of our fair State, has won the confidence and admiration of a grateful people.

LAKE COUNTY.

W. D. Bush, M. D.

The health of Lake county during the past year has been very good, indeed. Most of the sickness has been malarial fever, a few cases of continued fever, mild typhoid, some whooping cough and a few cases of measles last spring. Only two cases of smallpox occurred. People who are troubled with malarial fever are those who live in low, flat and damp locations; that is, near ponds of stagnant water, close to marsh flats and near swamps, and live in small one-story houses and drink surface water. We find that those who live in two-

story houses and are located in high, dry locality, and have fresh, pure air and good drinking water are seldom troubled with fever. This is one point the people as a rule should learn, for after buying and building in this low and damp locality, it is simply impossible to keep malaria out of the system, as they live in it day and night. Sanitary conditions are about as good as could well be expected. Leesburg has pure water from a deep, driven well, streets raked and cleaned once a week. Privies have open bucket-system, and cleaned every other week. House-to-house inspection once a month. We had two cases of smallpox, which were very mild and did not cause any anxiety or uneasiness among the people, as most of them have been vaccinated and have learned that vaccination is a preventive to such a disease, and by disinfecting and isolating the patients there is not much danger of spreading or contracting the disease. There cannot be too much said in regard to vaccination; that is, the good it will do in protecting one from having smallpox. Most of the people have learned this, but let all corporations and work shops and railroads do as the Plant System railroad—require every one of their employes to be vaccinated. The day for Florida to have either yellow fever or smallpox panics is a thing of the past, for the people have confidence in the Board of Health and its efficient officers, who, with good judgment and control, if left untrammelled, will keep such diseases out of the State. The people should feel proud of and stand by such officials, for, had it not been for them, every town in the State of Florida would have quarantined against Key West, Miami and Port Tampa City, for the simple reason that there were a few cases of yellow fever at those points. What would this have caused? Much injury to business, travel, and a panic among the people, and would have done Florida more harm than the freeze of 1894-'95. But this did not happen, as the Board knew what to do—put a quarantine around Miami, established a detention camp, prevented the spreading of the disease, and relieved the situation.

LEON COUNTY.

H. E. Palmer, M. D.

The health of the citizens of Leon county and Tallahassee during 1899 was exceptionally good. There were fewer cases of fever than ever before. Smallpox, a mild type, broke out among the negroes last April. There were about twenty-eight or thirty cases, but no deaths. A pesthouse was erected about two miles from town, to which all cases were sent. A

close watch was kept on all suspected points, with the result that the disease was soon under control and successfully checked. We were exceedingly sorry to learn of the appearance of yellow fever at Key West, Miami and Port Tampa. All feel assured that it was through no neglect of our State Board of Health. The people at large throughout this section of the State have unbounded confidence in the Board, and desire no change. Whooping cough and chicken pox of a mild type prevailed among the children.

LEVY COUNTY.

R. T. Walker, M. D.

The health of Levy county for the past year has been good. I have kept in touch with the doctors in different parts of the county, and have been posted as to the nature and quantity of the sickness that has prevailed at different times. An epidemic of whooping cough, which was quite general, prevailed the latter part of '98 and early part of '99. This was succeeded by an extensive and almost exhaustive epidemic of measles (only three or four families in the town of Cedar Key escaped). During the summer months bowel troubles prevailed to some extent. While smallpox existed in many parts of the State, and even in adjoining counties, yet, I believe, there has been none in this county during the year. I have threatened, urged, admonished and persuaded the people to be vaccinated, and many have submitted to the operation, but there still exists a very strong prejudice against it and I suppose not more than one-third of the people in the county are protected. This prejudice is not confined to the ignorant and unlearned, but is found largely among the educated and well-to-do people. In certain localities of the county, malaria is the prevailing trouble during the summer and fall. This year, the doctors write me, there has been less than usual. The sanitary condition of the county is as good as usually found in the country districts. Some sanitary and hygienic improvements might be made, but it is hard to have suggestions and recommendations along this line carried out, as the people have not been educated up to the point of appreciating sanitary measures. Most of my efforts in this direction have been confined to the town of Cedar Key, where I have succeeded in having some sanitary work done and have prevented the creation of sanitary nuisances. But it is hard to get the Mayor and City Council of the town to carry out all my suggestions. They haven't learned the value of a few dollars judiciously spent for sani-

tary work. Our town is almost entirely free from malarial troubles, except as brought in from the adjacent country, and could be made the healthiest town in the State. There was some little excitement produced by the announcement of yellow fever at Key West, Miami and Port Tampa, but the panicky conditions produced some years ago by the proclamation of yellow fever in Florida are no longer known. The people are learning to have great confidence in the State Board of Health and its management of our health matters, and are much more serene over the announcement of infectious epidemics than they formerly were. The sentiment of the people in this section is very largely in favor of public health matters remaining under the control of the State Board of Health, and against any transfer to the national authorities.

MADISON COUNTY.

L. C. Ruter, M. D.

Taking the year as a whole, it has been a fairly healthy one. During the months of January, February, March, April, May, June and July, we had very little sickness. The months of August, September and October, were attended with more malarial troubles than we usually have during those months. We have only had a few cases of typhoid fever in the county this year; not nearly as many as we usually have. The only contagious disease we have had during the past year was a mild epidemic of whooping cough. I think within the past year we have vaccinated about one thousand people in this county. Most of them were people living in the town of Madison. The people here seemed to understand the protection vaccination afforded, and were very much in favor of it. During the outbreak of yellow fever in Key West there was no alarm or fear felt here. The people have the utmost confidence in the State Board of Health, and felt no fear of it gaining any foothold in any other place. During the past year the sanitary conditions have been better than for many years. Throughout the summer I kept watch for anything I thought would be a menace to the public. I had all decomposing matter removed or burnt as fast as I could find it; required all privies to be kept clean; kept all slops and garbage from being thrown on the streets. Several old houses that they could not or would not keep clean I had torn down. In this I had the chairman of the sanitary committee of the Town Council with me. I gave advice as to the water supply, etc. Although in this I could not have it as I would like

to have had. I think the standpipe is too large for the town, and the authorities do not flush the mains out enough, thereby making the people drink stagnant water. The health of the town and county at present is splendid. Sanitary condition good.

MANATEE COUNTY.

Hon. E. M. Graham.

I am glad to say that Manatee county has had entire exemption from all contagious and infectious diseases for a period of more than eleven years, attributable largely to the splendid and efficient service of the State Board of Health of Florida, and had the Board had the entire control of quarantine between Havana and Florida the past year, I am sure the same might be reported from Key West, Miami and Port Tampa. The general health conditions of Manatee county at the close of the year are good. No violent cases of sickness existing at this time, so far as I have any information. There have been a few cases of whooping cough amongst the school children at Braidentown, but all of these cases are getting well, and I know of no other cases in any other portions of the county. There seems to have been a failure to comply with the law, by physicians and others, in the matter of reporting births and deaths to the State Board, as required by the statute, and in the matter of burial permits, which seems to have been almost wholly neglected.

NASSAU COUNTY.

J. L. Horsey, M. D.

Taken as a whole, the health conditions prevailing during the year were good, and very little sickness existed, beyond the usual diseases incident to changes of season, such as colds, acute diarrhoea and malarial fevers. The only exception to this good health record worthy of notice was the existence of a few cases of smallpox at Fernandina. These cases, six in number, were introduced from the neighboring city of Brunswick, Georgia, where the disease prevailed to some extent. All of these cases of smallpox were promptly isolated in the pesthouse. All of the infected houses where cases were found were at once disinfected, and all persons known or suspected to have been exposed to the infection were vaccinated. As a result of these measures no other cases of the disease developed. Upon the appearance of the first case of smallpox, vaccination was taken up, and the public

urged to avail themselves of this means of protection; and I am glad to report that a large part of the several communities of the county took advantage of the offer of "free vaccination." I think that at least 75 per cent. of the white population and about 25 per cent. of the negroes have been vaccinated. I have found some difficulty in vaccinating the laboring class of negroes. They seem to fear vaccination more than they do the mild type of smallpox which has so generally prevailed. For this reason it would be opportune just now to have a new section inserted in the rules and regulations of the Board, making vaccination a prerequisite to employment. During the late summer months, when the existence of yellow fever was announced at Key West and Miami, very little alarm was manifested by the people of Nassau county. They seemed to feel perfectly secure, and expressed their confidence in the ability of the State Board of Health to control the disease and thereby prevent the spread of the infection. This state of serenity was marred, however, when the report of yellow fever at Port Tampa was announced, and at the same time the city of Jacksonville declared a quarantine against Tampa and Fernandina, the latter because Fernandina permitted a negro excursion to come in from Tampa. After the excitement caused by this usurpation of power on the part of Jacksonville had subsided, calm and quiet again reigned, and nothing more was thought of yellow fever. This condition is gratifying, when but a few years ago the announcement of a case of yellow fever at any point in the State, or, in fact, any part of the country, was a signal for a general quarantine of the "shotgun variety," a system of quarantine which, in its effect, was far worse and had more terrors than yellow fever or any other disease.

ORANGE COUNTY.

R. L. Harris, M. D.

During the winter and spring months of the year there was little sickness of any kind among the permanent citizens. There were probably more invalids than usual from other States. It was noticed that there was a larger per cent. of invalids here on account of rheumatism than from any other cause. Nose and throat troubles probably rank next. There were less consumptives than there have been any previous winter. We had no contagious or communicable diseases in the county during the winter and spring months. While we had some extreme cold weather, there was no pneumonia or pleurisy, and but little acute bronchial troubles of any

kind. The general sanitary condition of the county was remarkably good during the above months. The summer months were ushered in with the usual amount of bowel troubles among children, but of a mild type, and with fewer deaths than during the previous summer. There was some malarial fever during the summer months, especially on the west side of the county and along the St. Johns river. Typhoid fever was conspicuous by its absence. We had one case of smallpox, which occurred in July. Prompt isolation prevented the spread of the disease. There were no other contagious diseases during the summer months. The larger towns maintained a much better sanitary condition during the past summer months than before. In the smaller towns there was room for improvement, especially in the disposition of night soil. The city water of Orlando developed an odor during the summer, as it has usually done in the past. There was much complaint and a great deal of investigation and talk, which came to nothing. It is hard to say that the water is unhealthy, from the fact that hundreds of families use the water and have no sickness; but there is no question but what it contains, especially during the summer months, an abnormal amount of vegetable and organic matter. I have heard of no complaint about the drinking water in other parts of the county. During the spring and summer months Orange county was probably as thoroughly vaccinated as any county of the State. Every physician and municipal officer in the county took an active interest in it. When a case of smallpox was found to exist in the county, vaccination was pushed with renewed vigor. In Sanford and Orlando it was practically made compulsory. From the best data that I could secure, between six and seven thousand were vaccinated, a large percentage of them being negroes. With the fall months came an increase of malarial fever along the St. Johns river and around Lake Apopka, on the west side of the county. There was probably more malarial fever in Orange county this year than for the ten previous years combined. Scarcely any one escaped chills and fever who lives within two or three miles of Lake Apopka, where, for years before, intermittent fever was almost unknown. There was little malarial fever in the balance of the county; scarcely any occurred along the ridge extending from Sanford south along the railroad. There were quite a number of cases on the east side of the Contoohatchee river. Typhoid fever was again conspicuous by its absence; there were but few cases. Scarlet fever developed in Orlando during the fall months, and up to the present there have been about ten

cases, two or three of which have been quite severe. There are now two or three cases. Every possible precaution was taken to prevent its spreading, but the fact that many have it so mildly, that the children continue to go to school, makes it almost impossible to eradicate the trouble. The Council took the matter up some time ago and had the city physician make a weekly examination and inspect every case of sickness among children where there was any report of an eruption or anything of a suspicious nature. The method is still being pursued, but a case now and then bobs serenely up, nevertheless. With one exception the people paid no attention to, and manifested no uneasiness with reference to, yellow fever. At the time of the outbreak at Port Tampa, when it was officially announced that yellow fever existed at that point, people getting off the train here who were known to have come directly from Port Tampa, created an alarm that it was impossible to allay at once. A misunderstanding of the situation was rather more the cause than a lack of faith in the State Health officials. In less than a week after the excitement here the public confidence had been so fully re-established that I do not think the alarm could have been repeated under the circumstances. It was remarkable that so little uneasiness was manifested during the epidemic, which can only be attributed to the public confidence in the State Board of Health. During the past month there has been remarkably little sickness of any kind. Whooping cough is now prevalent all over the county, but it is of a mild type, and deserves but little attention. The sanitary conditions are good everywhere. There was some trouble during the summer and fall about a ditch in the suburbs of Sanford, which has been stopped up and caused an overflow of a large area of land just outside of the corporation. I inspected the ditch, took the matter up with the County Commissioners and tried to devise some way to have it opened, but failed. As a matter of fact, I rather doubt whether there was any increase of sickness on that account, as there was no more sickness along the borders of the overflowed district than in any other parts of the city. There has been some complaints also from Sanford of the water from the St. Johns river backing and overflowing a considerable area below the city. The matter was brought to my notice, but, as there was no remedy, I made no investigation.

PASCO COUNTY.

E. R. Weaver, M. D.

Having been appointed agent for the State Board of

Health in June, I had best summarize the conditions of health and sanitation of Pasco county for the past year from that time, prior to which none of the usual diseases dependent upon heat and the conditions of summer had made their appearance, and at which time we had only received one visitation of epidemic or contagious disease, which was an importation of smallpox from Lake City, which, luckily, made its appearance in Dade City, where the county officials would necessarily make a more vigorous attack upon it than elsewhere throughout the county.

A failure on the part of some of the physicians in attendance to recognize and report the disease until the incubation period had expired and there had been a new development of the disease in those exposed, is one of the causes of so many cases at some places. Your agent visited all of the infected places and compelled vaccination as far as possible, as soon as notified of its existence. About 75 per cent. of our population have been vaccinated. Most of the unvaccinated are late importations of negroes on turpentine farms, which I find it rather a hard matter to keep up with. As in the past two or three months, a sporadic case of whooping cough makes its appearance, which amounts to most of our sickness, except some colds and an occasional case of gripe. Report of yellow fever in the State did not cause the usual afflux from our near proximity to Tampa that it has always done before, which was on account of the confidence existing that the steps taken by the State Board were sufficient to prevent any serious spread of the disease. Sanitary condition is very good.

POLK COUNTY.

F. M. Wilson, M. D.

In making this, my last monthly report for the year 1899, I have thought it proper to give a general summary of the work done in behalf of the public health. The sanitary condition of the towns in my county has continued good, with few exceptions. The municipal authorities have in every instance acted promptly when any suggestion has been made touching health matters in their respective towns. The superintendents of the various phosphate plants have, as a rule, shown a perfect willingness in assisting me, and the public generally entertain a high regard for every measure that tends to better sanitation. At the beginning of the year we had a widespread epidemic of measles and whooping cough. I estimate that there were a thousand cases of measles in the

neighborhood of Bartow alone, and fully one-third as many cases of whooping cough. In both of these diseases the mortality was light. About the 7th of March, in response to a telegram from you, I visited Dade City, in Pasco county, where I found two cases of smallpox. By the assistance of the Mayor of the town, we effected prompt isolation of the cases and suspects, placing a guard around the premises, as per rules of the Board of Health. There was no further outbreak of the disease in this instance. As soon as I returned from my mission to Dade City I was called to the Land Pebble mines, in my own county, where I found seven cases of smallpox in a compact negro quarter. The disease was of mild type, as a rule, and had existed several days before notice was taken of it. At this time a genuine case of the confluent variety caused a stampede. Gathering the suspects, some twelve or fifteen in number, I had them quartered to themselves, and placed both patients and suspects under an efficient guard. Five cases developed among the suspects, none outside the camp or guarded quarters. No deaths. As soon as I recognized the nature of the disease, the work of the mines of Land Pebble, Kingsford, Palmetto and Bone Valley. Indeed, not one escaped. The virus, which you furnished in abundance, was the best I ever saw, and the people sought its application eagerly. When, later, yellow fever appeared in other parts of the State, there was no fear or excitement manifested in Polk county. The very able and successful management of this disease by our State Board of Health ever since it was created has inspired our people with the greatest confidence in the executive abilities of the Board. There is no longer a thought of carrying a shotgun against intruders from an infected locality, as practiced years ago.

PUTNAM COUNTY.

C. E. Welch, M. D.

In response to yours of late date, will say, that the sanitary condition of Putnam county has been kept up to the usual standard throughout the year. The people generally have co-operated with the State Board in sanitary measures, and seem to feel the necessity of so doing. Each little village has been alive to the necessity of such work, and its bearing upon the public health. Your agent vaccinated over three thousand persons during the past twelve months, besides, there were a great number vaccinated by other physicians who, with a few exceptions, did it gratuitously. Through August, September and October we had an unusual number of cases of old-fash-

ioned ague, but they were amenable to treatment and none were of the pernicious type. We had fewer cases of the continued or typhoid types of fever than usual. During October and November we had several cases of scarlatina, brought by parties returning from the North. The cases were of mild type, showing no disposition to spread. Every case recovered. Although Palatka is on both the Florida East Coast Railroad and the Plant System, there was entire absence of any panic on account of the yellow fever at Key West and Miami, feeling that the State Board was entirely competent to take care of their interests. There have been no cases of smallpox or yellow fever in our county, nor any suspicious cases of either. Our people generally have an abiding faith in the State Board of Health, and sincerely hope that it will be left untrammelled in its operations for the public good.

SANTA ROSA COUNTY.

C. E. McDougal, M. D.

The sanitary condition of Santa Rosa county, I think, will compare favorably with that of other districts of similar population, where the towns are small and their revenues scanty, and the dwellers in the country are widely scattered and quite unfamiliar with the requirements of proper sanitation. The general health of the county during the year now drawing to a close has been remarkably good. No acute sickness has prevailed to any extent, with the exception of malarial fever and epidemic influenza; the former having been less prevalent, and generally of much milder type, than in previous years. Influenza appeared early in the winter and prevailed extensively, but the epidemic was mild and amenable to treatment, except in a very few cases of aged persons. Occasionally cases of pertussis, rubeola and mumps have been reported, but I have known of no epidemic prevalence of those diseases. Notwithstanding reports of smallpox elsewhere, even in neighboring counties, the disease has not appeared among us, and the people at large have not awakened to any interest in vaccination, consequently a very small proportion of the population is properly protected. Indeed, the actual presence of the disease has but slight effect on the prejudices of the community at large, and very few of the country people have been vaccinated. Many of them declare they would rather run the risk of contracting smallpox. After a residence of more than forty years in the county seat, during which smallpox has appeared in the town and vicinity seven times, I can say from experience that it is useless for a phy-

sician to keep a supply of vaccine unless the disease prevails at the door, and, even then, comparatively few submit to vaccination. The existence of yellow fever, as reported in the neighboring States to the westward, during the past summer, and its appearance in the southern extremity of our own State, excited no alarm or apprehension in this community. The prevailing sentiment was expressed in the universal opinion that the State Board of Health would effectively guard us from all danger.

SUWANNEE COUNTY.

H. F. Airth, M. D.

There has been a marked absence of cases of continued fevers during the year just closing, and all sections reported very little sickness of any nature. In Live Oak, a small child was bitten by a dog, supposed to be rabid, about the middle of last month. The child has been taken to the Pasteur Institute in New York for treatment, and a town ordinance prohibiting dogs on the streets, without a muzzle, rigidly enforced. Measles, which stayed in some settlements until lately, seems to have exhausted itself. An attempt to empty a pond in Live Oak by draining into a deep well dug for the purpose seems to be a success, and if it still proves so after heavy rains, will solve the problem of the water holes. Many of our farmers during the year have had deep wells bored, obtaining a supply of water, which, though containing lime, is much superior to water from surface wells or unsanitary cisterns.

WALTON COUNTY.

C. A. Landrum, M. D.

We have had as good health as compared with other years. The last outbreak of contagious and infectious diseases have been few in number, and confined to those minor diseases, such as mumps, whooping cough, etc., which are treated mostly by nursing and home medication. In the western part of the county one of our practitioners had some cases of pseudo-membranous croup, with one fatal result. In the lime stone district there were several cases of typhoid fever treated by practitioners from Geneva, Ala. I think there was one fatal case. We have had no case or suspected case of smallpox. One or two years ago, our people were frightened by its appearance in the southern part of the county, and a large majority were protected by vaccination. Since then they have become apathetic, and very few are receiving protection. I

do not think that the sentiment is against it, but only a disinclination to submit to the pain and discomfort. I am sorry to say that no real sanitary work has been done. The natural drainage is good, and our people trust to that almost wholly. We have never had any cases of yellow fever here, except a few cases at the bay coast some years ago. The citizens feel a sense of perfect security and even citizens and sojourners from the northern and western States share in this feeling. At the time the disease was prevailing at Miami, Port Tampa and Key West, the public sentiment was that it was no more than what was to be expected under the circumstances.

WASHINGTON COUNTY.

F. C. Wilson, M. D.

In making my annual report of the health and sanitary condition of Washington county, very little more can be said than my monthly reports contained. In the early part of the year lagrippe and catarrhal troubles prevailed to a considerable extent, frequently complicated with pneumonia, with but few deaths, however. During the summer and fall months we had some malaria, with an occasional case of typhoid fever. We have had no contagious diseases of a serious nature to contend with this year. No return of smallpox, owing to the thorough fumigation and general cleaning up of the places infected the previous year. Notwithstanding my efforts, there is a prevailing sentiment against vaccination, and not exceeding 25 per cent. of the people are protected. The sanitary condition of the county, as a whole, has been fairly good, and we hope to see an even better status in our towns this year, as there is a growing appreciation of such measures. The people of this portion of the State were scarcely disturbed over the yellow fever epidemic. Our remoteness from it, and the perfect confidence of the public mind in the management of the State Board of Health, seemed to give a feeling of such security that business and travel were not affected.

DR. SWEETING'S REPORT.

KEY WEST, FLA., January 20, 1900.

Dr. Joseph Y. Porter, State Health Officer:

DEAR DOCTOR—In compliance with your request, please find below a short report of the epidemic of yellow fever which commenced in this city in August, 1899:

After an absence of twelve years, and, in fact, the

first time since the organization of the State Board of Health, the much dreaded scourge gained a footing in our midst. As our summer was well advanced, we were growing confident in the hope that another season would pass in safety from epidemic disease, though our efforts in quarantine inspection and disinfection to exclude it were not relaxed. Alas! we were doomed to disappointment, and our Island City, then on a business boom, received another setback.

The first well established case of yellow fever occurred in the person of Mr. Dennis Eagan, a young gentleman in the United States custom service, about twenty-five years of age, a native of Jacksonville, Fla., and only recently located here. He resided on the corner of Duval and Fleming streets. Mr. Eagan was taken sick on the night of August 26th. I saw him on the morning of the 27th, and learned that he had had a chill during the night. He then had a temperature of 103 degrees, with a pulse of 104, headache, pain in the back and limbs, and a very irritable stomach. These symptoms rendered the case one to be watched, and as it advanced we had the typical symptoms of yellow fever—high temperature and disproportionately slow pulse, albumen in urine, icteroid condition of conjunctiva and skin, spongy gums and black vomit. Death ensued on the 5th day of the disease. On the 28th, or two days after seeing Mr. Eagan, I wrote you at Jacksonville, suggesting the advisability of your returning to Key West, and later, August 31st, I wired for your presence here. Prior to the sickness of Mr. Eagan I did not know, nor did I even suspect the presence of yellow fever in Key West. In fact, when discussing the health situation of the city with you only a few days before Mr. Eagan's sickening, notably on August 23d, you will probably recall my saying to you that we had not then, nor had we had during the summer, anything whatever of a suspicious character or of a doubtful nature, and that we had no reason to indulge in any unpleasant anticipations for the remaining summer season. The case of Mr. Eagan, which developed in my own practice, on the date above mentioned, and the case of Dr. Browder, another of my patients, both occurred in the week following this conversation with you, and came with startling abruptness. You left the island the afternoon of the 23d, and I was called to see young Eagan on the morning of the 27th, and I wrote you the following day, forwarding my letter to Jacksonville. I was called to see Dr. Browder on the evening of the 29th, and found him sick with fever at his rooms in the lower portion of the city. This gentleman was sta-

tioned at Key West as a special inspector of customs, and had an office in the Custom House, where young Eagan was also employed. He boarded, as I have said, in the lower part of the city, and about four blocks from Mr. Eagan's place of residence. I learned on arrival that Dr. Browder had been sick three days, but thinking that he had only a light bilious indisposition (being himself a graduate physician), he had been treating himself until his stomach, becoming very irritable and distressed, he was compelled to seek additional medical aid, and I was called in. I found him with a temperature of 101 degrees, pulse of 60, a generally jaundiced condition of the entire body, and 35 per cent. of albumen in his urine. From my first visit to Dr. Browder, on August 29th, to September 4th, I had four cases under my treatment at his boarding place, viz: Mrs. McDonald, attacked on the 30th; Mrs. Sudlow, wife of the proprietor taken sick August 31st, Dr. Callahan stricken the same day, and Mr. King, whose seizure was on September 2d. As before stated, after making my diagnosis in the Eagan case, I immediately telegraphed for your presence in this city. In the meantime I isolated the sick and guarded the premises, instituting, in fact, all the usual precautionary measures to prevent the spread of the disease. About this time I made inquiry of our local physicians as to the sickness in their practice, and the nature of the fevers, if any. To my surprise, Dr. J. N. Fogarty informed me that he had under his care quite a number of cases of fever, but their nature was not suspected by him, and had been characterized as dengue, until I called his attention to my diagnosis in the Eagan case. Dr. Fogarty very kindly invited me to see his cases, and on investigation I found that he had eleven cases of fever, which, in my opinion, were all cases of yellow fever. Several of his patients were in the house already mentioned as being the boarding place of Dr. Browder, Dr. McCallahan, Mrs. Sudlow and Mr. King. These eleven cases of fever gave nine foci of infection, showing that the infection was by this time very generally disseminated through the city. None of Dr. Fogarty's cases, just mentioned, however, sickened prior to August 26th, the date of the Eagan case. Cases were soon reported from many other localities, and the fever spread apace until it speedily became epidemic. With few exceptions the majority of our native children were attacked with this fever, but, I am pleased to report, with rarely fatal result. The last case of the epidemic occurred on November 30th, making a total (reported) of 1,320 cases and 63 deaths. A small mortality, due, no doubt, to the mildness of the dis-

ease in the majority of cases. In almost every instance the infected premises were cleansed and disinfected as soon as the case terminated. Later, at the cessation of the epidemic, there was a very general cleaning up and airing and sunning of bedding and house furnishings. Where the bedding was badly stained by the excretions, it was destroyed by fire. Quarantine against Key West was maintained until the conditions of the following proclamation were fully complied with, all embargo being lifted on December 15th:

MIAMI, FLA., November 14, 1899.

To the Citizens of Key West, Florida:

A decrease in the number of cases of yellow fever at Key West, as reported for the past three weeks, and the total absence from the thickly settled portions of the city, makes it possible and desirable to remove the embargo on travel which has restricted the movements of the people for the past three months. The spread of infection of yellow fever over the city has been general, but the reported cases by no means represent the total number which have sickened from yellow fever, for the reason that many parents treated their own children, and among the native children and native negroes the disease was so mild, as a rule, as to require but little medication and no professional assistance. Therefore, it is neither possible nor practical to undertake a general chemical or artificial disinfection of houses, because such an attempt would be to guarantee that a total destruction of yellow fever contagion had been made in the entire city, which, as a scientific certainty, under the circumstances as cited above, it is impossible to insure.

It is believed, however, that quarantine measures can be relieved of their stringency, and withdrawn, and the city be made reasonably safe for non-immunes, when householders and housekeepers of Key West shall have instituted a general cleaning and airing of their homes, by exposing all bedding and bed room furnishings, such as mattresses, pillows, curtains, portieres, rugs and carpets, to sunlight and air, for three successive days, and by a careful and vigorous sweeping of rooms. Storekeepers must remove all goods from shelves and clean and brush both goods and shelves before replacing. Especially must this latter be done in those stores where families have lived in the rear thereof, and have had sickness.

Accordingly, I request of the citizens of Key West a prompt compliance with the requirements as set forth, to the end that, when it is reported by the agent of the State Board of

Health for Monroe county, that the same has been done by the citizens of Key West, that then quarantine restrictions on travel to and from Key West, except as relating to household goods, may be removed.

JOSEPH Y. PORTER, M. D.,
State Health Officer.

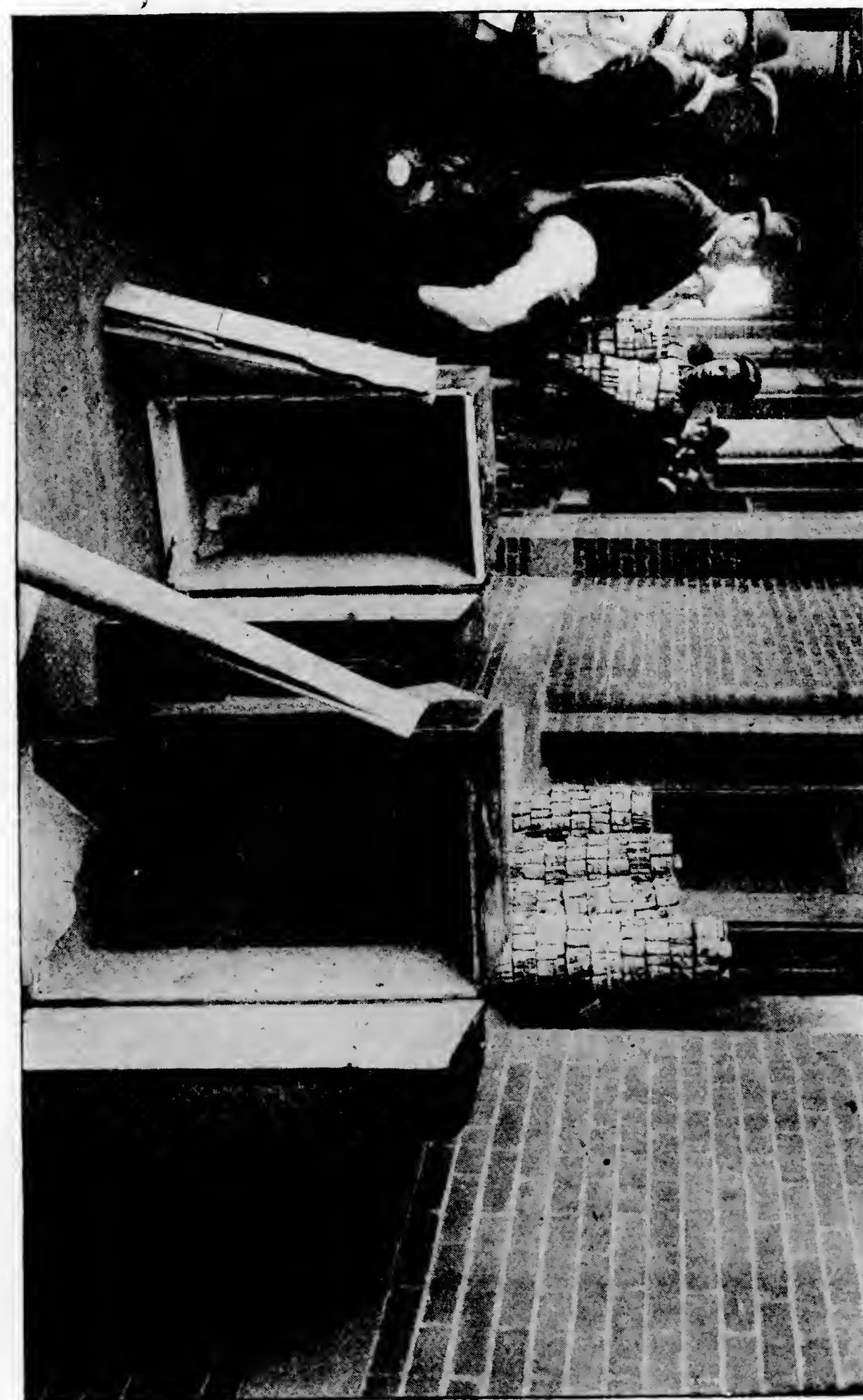
A sporadic case of yellow fever occurred on January 5th, 1900, in the person of a Mr. Lawrence, an engineer at the water works at the United States barracks. This gentleman had remained in Key West all summer, but had escaped having the fever, being quarantined within the Federal territory, although several cases occurred there. On the raising of quarantine, on December 1st, he returned to the residence of his wife and child, and a month later developed a genuine case of yellow fever. This house had had cases of fever in it during the epidemic, but was duly cleansed, and Mrs. Lawrence testified that they had burned many articles. The family and those living in the immediate neighborhood being immunes, little difficulty was experienced in isolating the patient.

Another case was reported on the 16th of the same month, but careful investigation by yourself, Dr. Murray and the writer, leads to the conviction that it was not one of yellow fever. Aside from these there has been no sickness of a questionable nature since the 30th of November, 1899.

I am quite convinced that our past epidemic is traceable to infection from Havana, Cuba, brought over either by imperfectly disinfected baggage or by some one passed as an immune who had never experienced an attack of the disease. Here (Key West) this is the generally accepted hypothesis. Personally, I incline to the belief that our epidemic is due to baggage which (though marked and labelled "Disinfected") was never, or but insufficiently, sterilized at Havana. The most searching investigation at the time and subsequently has failed to discover, among those first stricken with yellow fever, any person or persons coming within the latter mentioned possibility. On the other hand, it is a fact that it was almost immediately bruited about that two of the gentlemen first sickening had handled and examined baggage lately arrived from Havana, and seized by the customs authorities for supposed smuggling. It is to be borne in mind that after the military occupation of Cuba by the United States and the establishment of the United States Marine Hospital Service in sanitary control of the ports and harbors of the island, that all shipping and baggage leaving Cuba for the

United States was disinfected at the port of departure, and was then admitted to Florida (and others of the States) upon the certificate of the Marine Hospital Service testifying to its having been properly sterilized. The records of the Key West Quarantine Station show that after the 1st of July, 1899, but little baggage arrived at Key West from Havana which had not been previously sterilized at Havana and bore the certificate of the United States Marine Hospital Service to that effect. No baggage bearing these government certificates was disinfected at Key West. To have redisinfecting it would have been to discredit the work of the United States quarantine officials (the United States Marine Hospital Service) at Havana, and, as you explained to me several times when the topic was under discussion between us, would have provoked antagonism and endless friction. In view of these facts, as before stated, I am strongly of the opinion that the epidemic of Key West of 1899 was caused by the admission of infected baggage, passed by the State quarantine inspectors under a guarantee of safety given by the Marine Hospital Service at Havana. The statement furnished you by Dr. Browder bears me out in this, and a careful consideration of the following facts will, I am sure, equally convince all but the previously biased, to-wit: On August 14th two trunks came over from Havana on the Olivette, belonging, I believe, to one Alphonso, which were labeled and stamped by the Marine Hospital Service at Havana as having been disinfected and passed, and having the catches wired and sealed. Under the suspicion that they contained smuggled goods, they were seized by the customs officers and an examination, determining that the interiors were not as deep as the outside of the trunks, led the observed to suspect false bottoms, and, hammer and chisel being brought into requisition, such was found to be the case. The trunks contained soiled clothing and various wearing apparel, but under the false bottoms were stowed rolls of cigarettes. This fact is mentioned because I have heard that the Havana officers allege that this state of affairs was known to them, and that they had extracted the false bottoms, removed the cigarettes, disinfected the textile contents and replaced the same. That this could not have happened is self-evident, unless those on the "Protector" (the government disinfecting barge at Havana) possessed joiner's tools and PAPER OF THE PATTERN OF THE INTERIOR LINING OF THE TRUNKS.

These trunks were taken to the storage room, in the third story of the Custom House at Key West, a small apartment directly under the roof, with but one window and a door,

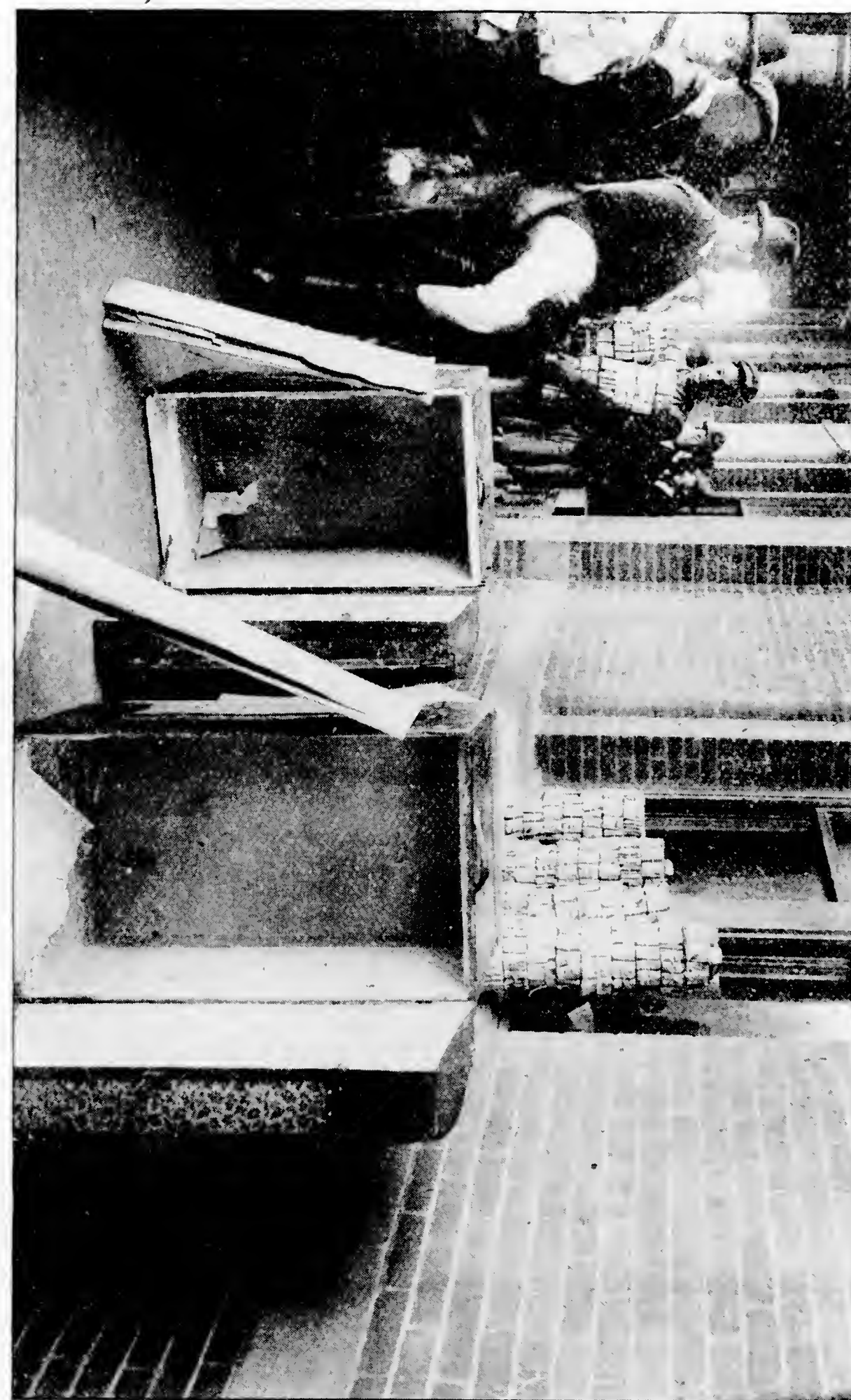


INTENTIONAL SECOND EXPOSURE

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which is generally kept closed, and in this confined atmosphere they remained, and while lodged there were examined by Dr. Browder and Mr. Eagan. I understand that Mr. Andrews, the chief inspector, and Dr. Browder, special inspector, counted the cigarettes. Mr. Andrews was an immune, but Dr. Browder had never had yellow fever. I am also informed on reliable authority that Mr. Eagan handled some of the trunks' contents, notably some attractive neckties. These trunks were afterwards sold at public outcry, and I am informed that you purchased them. Among the clothes in the trunk was a quantity of soiled linen, of no very savory odor. Trusting that the foregoing may serve to throw some light on the Key West situation the past summer and contribute towards fixing the responsibility for the introduction of yellow fever into Florida, I am,

Yours very truly,

C. B. SWEETING, M. D.,
State Port Sanitary Inspector.

I append several statements and certificates in connection with and substantiating the foregoing report:

KEY WEST, FLA., September 19, 1899.

DEAR DOCTOR—Per your request, I enclose you certain memoranda which may prove useful to you in tracing the source and origin of the present epidemic of yellow fever, from an attack of which I am now convalescing.

First—Let me say that I am an Alabamian, and not an immune to yellow fever prior to my coming to Key West.

Second—That I am a graduate physician of the Jefferson Medical College, of Philadelphia, and practiced medicine six years prior to entering government service, and therefore am cognizant of many things relating to disease which the ordinary layman does not possess the knowledge of or appreciates.

Third—That I have been here during the present summer, and have examined from time to time many trunks, always with the chief inspector of customs, who is an immune to yellow fever.

Fourth—That up to this present illness I have been in my usual good health here.

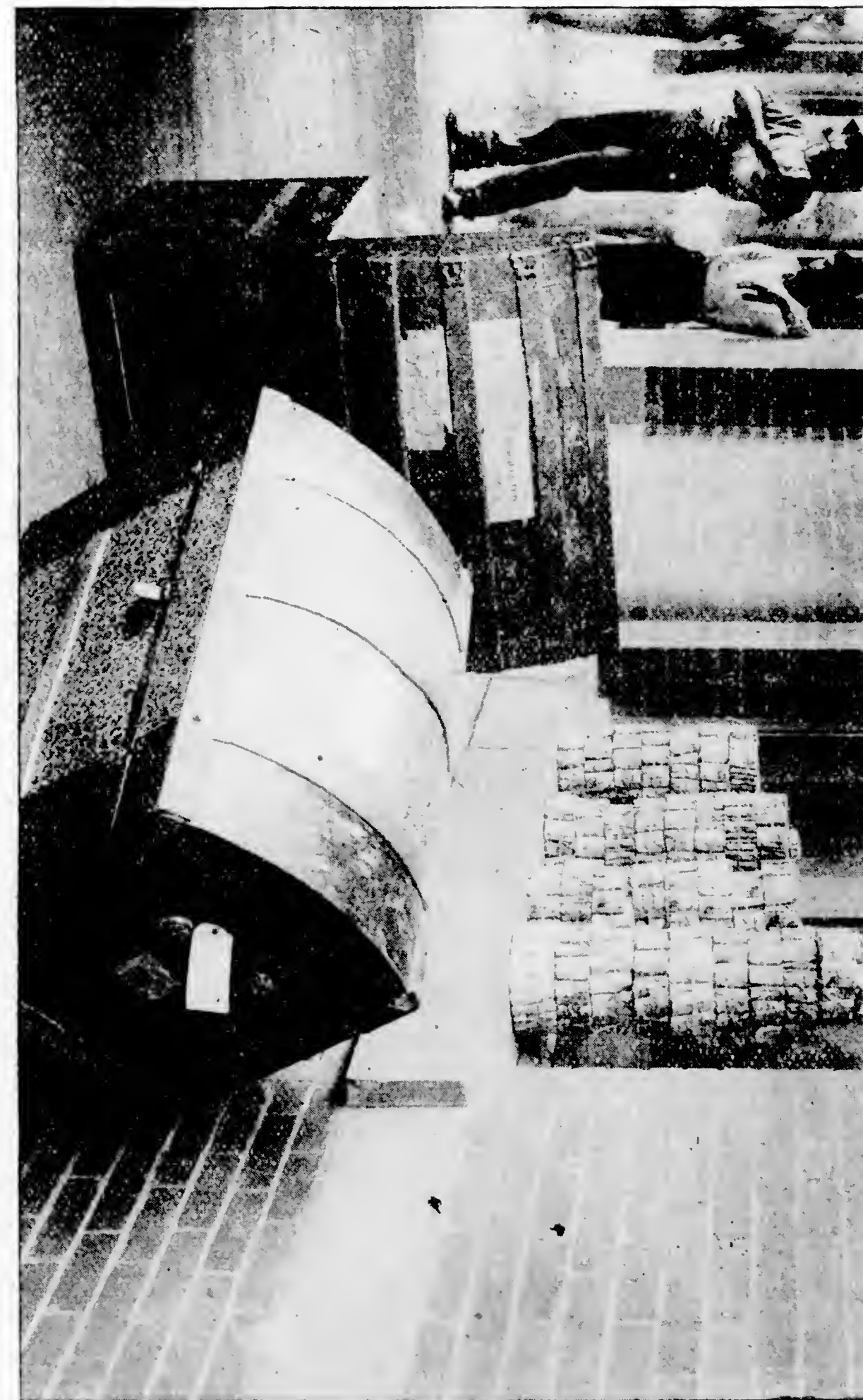
Fifth—That on the night of the 14th of August two trunks came over from Havana belonging to one Alphonso, which were labelled and stamped by the Marine Hospital Service at Havana as having been disinfected and passed, besides having the catches wired and lead sealed. The Chief Inspector, upon

examination of these trunks, found a false bottom in each of thin wood papered, under which were a quantity of cigarettes. In the trays of the trunks was a lot of soiled clothes, shirts, etc., and outside clothes. I assisted the Chief Inspector to count the packages of cigarettes. The seizure room of the Customs House is in the third story under the roof and rather warm, and when not used is closed; therefore the atmosphere therein is always close. I do not exactly recollect, but I looked into those trunks on more than one occasion. This examination of the trunks took place on the 15th, the day following their arrival from Havana.

About the 22d and 23d I began to feel "ailing," and must have had some fever on the morning of the 24th, for I was dozing in my chair in my office all the morning. In the afternoon (24th) I had to give up and go to bed, but I did not send for Dr. Sweeting for several days afterwards, not knowing what I had, and not recognizing the sickness as yellow fever. I was very ill, and am told that I had albuminous urine. I know that I was much prostrated, so much so that I could scarcely turn in bed, and indifferent to many things going on around me. Skin yellow, which has not passed off yet. Young Eagan handled some contents of those trunks in my presence, such as neckties, of which there were several. He sickened on the 26th.

Sixth—The mailbag story which seems to have gone the rounds of the press elsewhere, was this: The Mascotte came in on one of her trips from Havana about that time; anyway, it was just before I was taken sick, and when I went on board as I generally did, I saw this bag lying outside of the mail clerk's office, and jestingly he said, "See that bag? It contains enough germs to infect the whole island of Key West," or words to that effect (may be I have not given the exact language) and giving as a reason that the bag contained letters and mail which had been accumulating at Havana for over a year, and was now on its way to Washington. I paid no attention to him, as I knew he was jesting, but, however, did not touch the bag, kick or handle it; therefore the stories in regard to my disturbing this particular mail bag are very silly. The bag was not taken from the deck during the stay of the steamer in port, was not brought ashore, therefore it could not have been a distributing *focus*. Again, if any one could contract yellow fever from those letters, the clerks at the Dead Letter Office in Washington should have been the sufferers. I have not heard of any one being sick with yellow fever there.

Seventh—It is said that a Mr. Edwards, a commercial man, introduced yellow fever into the hotel just prior to my sick-

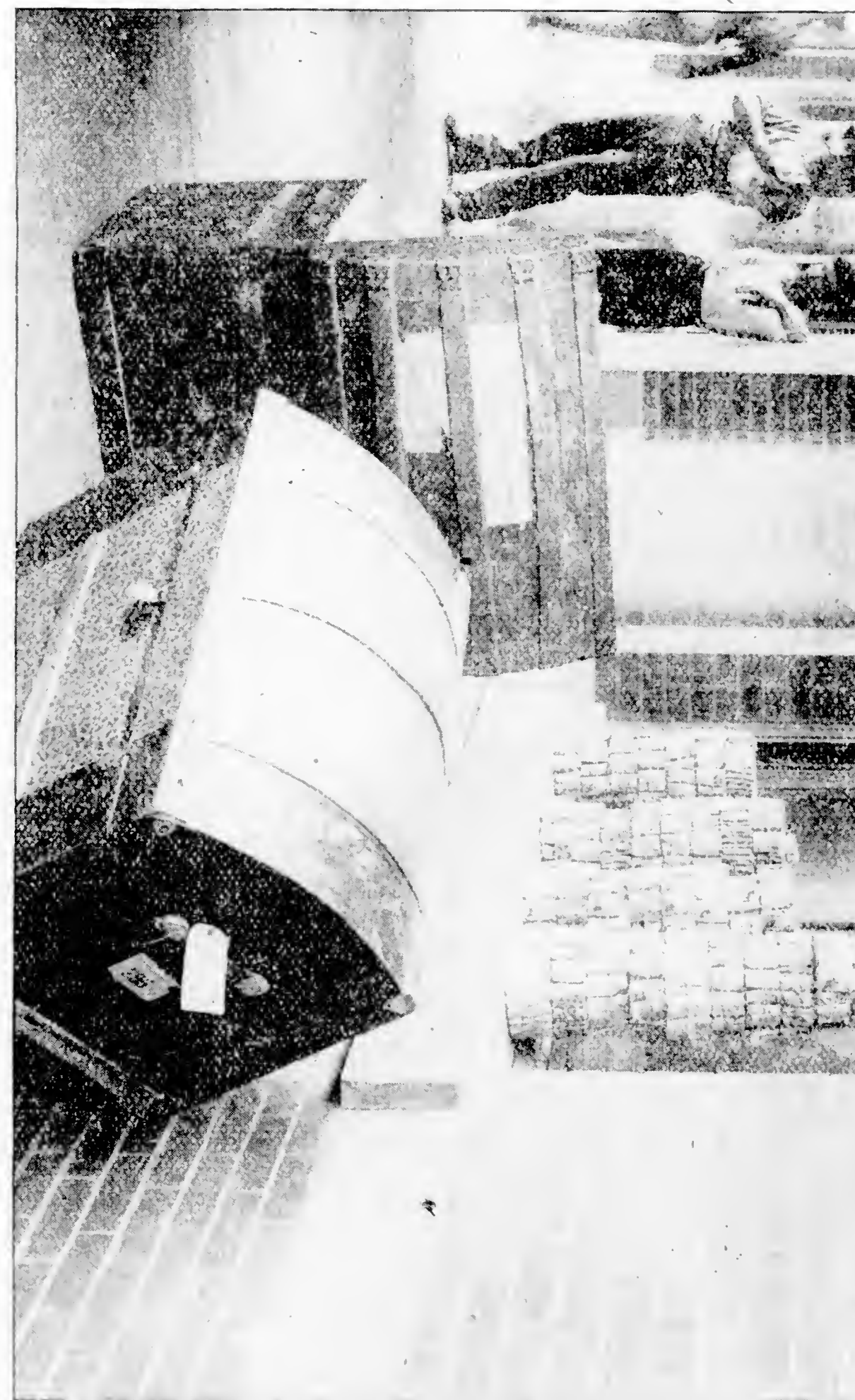


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Seventh—It is said that a Mr. Edwards, a commercial man, introduced yellow fever into the hotel just prior to my sick-



ening, but I saw Mr. Edwards and his sickness was in nowise like mine, or the others who fell sick after me. He was sick a day or two, and was attended by Dr. Fogarty; he then went out, and the next day, I believe, went down again, and sent for Dr. Maloney. No, he was not like any of the rest of us, when we were sick.

Of course I may be wrong in my conclusions, as every one is liable to be mistaken on any subject, and there may have been cases here prior to my sickness and that of young Eagan, of which I am not informed, but I am firmly persuaded that I caught my illness from the trunks which I examined on the 15th of August of this year.

(Signed) WILLIAM M. BROWDER,
Special Inspector of Customs.

KEY WEST, FLA., January 6, 1900.

I, Jeremiah Buckley, employe of the State Board of Health of Florida, do certify that on the night of August 14, 1899, the Plant steamship Olivette, from Havana, loaded two trunks for the fumigation room. Next morning, the 15th, Mr. Andrews, Customs House Inspector, came to examine them, and after lifting some dirty clothes in the trunk he found it had a false bottom. Mr. Andrews said, "Buckley, there is a false bottom in this trunk; get a hammer and we will open it." I got the hammer and raised up the false bottom; underneath was full of cigarettes. In examining the other trunk we found it like the first, with a false bottom full of cigarettes and dirty clothes. Mr. Andrews said he would have to take them to the Customs House after waiting to see if the owner would come. After an hour the owner came and Mr. Andrews took him to the Customs House to see the Collector, Mr. Allen; and Mr. English, another inspector, came for the trunks with a dray and took them to the Customs House.

(Signed) JEREMIAH BUCKLEY.
Sworn to and subscribed before me January 11, 1900.
W. HUNT HARRIS,
Notary Public.

KEY WEST, FLA., March 1, 1900.

Mr. Leander Andrews, Chief Inspector U. S. Customs, City:

DEAR SIR—Will you kindly inform me whether, when you examined and emptied the trunks with false bottoms which arrived here from Havana in August last, and were seized by you, the false bottoms of those trunks had the appearance of having been recently removed and replaced? If your sus-

picion had not been aroused from other cause and circumstances, would the interior of the trunks, after the clothing has been removed, excited any mistrust? Could, in your opinion the false bottom of the trunks have been replaced except by an expert carpenter, joiner or trunk maker, without showing that such had been tampered with?

Kindly let me have an answer at your earliest convenience.

Very truly,

KEY WEST, FLA., March 2, 1900.

DEAR SIR—In reply to your communication of March 1st, 1900, I will state concerning the trunks that my suspicion was aroused by the trunks being too shallow on the inside compared with the outside. To the best of my knowledge the trunks seemed perfectly natural otherwise! I don't think from the appearance of the trunks on the inside that my suspicions would have been aroused except by the cause stated above.

As to my opinion in regard to replacing the false bottom, I will say it must have been done by an experienced hand, as I don't remember having seen any signs of it having been removed.

Very truly,

(Signed) LEANDER ANDREWS,
Acting Chief Inspector of Customs.

KEY WEST, FLA., March 1, 1900.

Mr. Jerry Buckley, in Charge of Disinfecting Room, City:

DEAR SIR—When you saw the trunks which came from Havana last August and were seized by Chief Inspector Andrews, of the United States Customs House here, what aroused your suspicion that there was a false bottom to either trunk? Were there any indications that the false bottoms had been recently removed and replaced? Could you, without paper and joiner tools, have removed the false bottom, taken out the cigarettes, disinfected the trunks, returned the cigarettes and replaced the bottoms with papering, so that there would not have been a hint even at disturbance?

A prompt answer is requested.

Very truly,

KEY WEST, FLA., March 2, 1900.

SIR—Not before the two trunks were opened and Mr. Andrews searching them did I know of a false bottom in them. I got the chisel and raised the bottom. We examined the

bottom first, and remarked that it was no green hand that put the paper on it so even and smooth. To all appearance the paper was on some time. It was dry and hard, and no person could open that false bottom without breaking the paper round the edge, which was not broken.

I am, very respectfully, your humble servant,
(Signed) JERRY BUCKLEY.

DR. JACKSON'S REPORT.

MIAMI, FLA., January 20, 1900.

Dr. Joseph Y. Porter, State Health Officer:

DEAR SIR—In accordance with your request that I furnish you with an annual resume of the health and sanitary conditions of the lower portion of Dade county, permit me to state that this can be best accomplished by a compilation of my monthly reports for the year 1899, except as to the latter portion, during which no returns were forwarded to Jacksonville, in consequence of the pressure of other things brought about by the epidemic prevalence of yellow fever in the largest community under my jurisdiction.

The first matter of especial note to be touched upon by me relate to the appearance of smallpox at Miami early in the new year. As was the case, I believe, elsewhere in Florida, it was brought from abroad. The first case was a negro, picked up in North Miami, in the postular stage. It was reported that he had run away from the work train, where a negro had smallpox, at or near Fort Pierce, Brevard county. About ten cases followed. General vaccination was resorted to, and it is estimated that there were not less than five hundred primary vaccinations. We had ten cases in all. Since then we have had no more smallpox. There were no other contagious or infectious diseases up to the advent of dengue. But, before alluding to this disease, it may be remarked that the general health of Miami was not up to the usual average for a long time after the departure of the soldiers. Fortunately, and, no doubt, due to the thorough cleansing of the town practiced immediately after the departure of the troops, we experienced less typhoid and kindred fevers than was anticipated, and subsequently the general sanitary condition of the whole of lower Dade county could hardly be bettered.

About the middle of July I noticed cases of fever, which owing to the lateness of the season I could not consider a "grippe," and was rather too prevalent for malaria, because

of the rareness with which this latter is met with in Dade county. The amount of pain complained of and the rapidity with which the cases sprang up excited my suspicion, and I began close investigation. I found that none of these people had in any way been connected with the shipping or with the wharves of the town, and could, therefore, hardly have been exposed to any of the communicable diseases likely to be brought in in that way. When on Sunday morning, July 22d, I visited three of these patients and found them with a distinct rash and also a remission of fever, there was no further doubt in my mind as to a correct diagnosis. I immediately communicated with the State Health Officer, thinking that he was in Key West, requesting him to stop as he passed through Miami, but my letter was returned, he having already gone through, and I immediately forwarded it to the office of the Board in Jacksonville. The disease—closely watched by me—continued to spread, and I made several reports about it to you. On the morning of August 2d, upon going to my office, I found the Assistant State Health Officer, Dr. J. L. Horsey, awaiting my arrival. I explained the situation and took him to see such cases as I then had on hand. Up to this time I had not called the prevailing sickness dengue, nor did I or Assistant State Health Officer Horsey, because of the apprehension that the word dengue usually arouses in the public mind, so many thinking that there may be a possible mistake, and the disease be or is connected with yellow fever. This course was endorsed by the Assistant State Health Officer, as well as yourself, when you visited Miami later and investigated dengue. This was on August 24th, when you spent the day in Miami, and after having seen several cases with me, one of which was in my house, declared the disease dengue. This case in my house, which you saw and declared to be dengue, had a seizure of yellow fever, as you know, during the yellow fever epidemic. In a large majority of the cases, especially those of a severer type, I took bedside notes and prepared careful clinical histories. I did not do this, however, in the milder cases, or in those which I only visited once or twice. On the morning of September 1st, at 9 o'clock, I received a telegram from the office in Jacksonville, which was sent too late for delivery the night previous, stating the fact of two cases and one death from yellow fever in Key West, and ordering strict quarantine and directing me to look after matters accordingly. I immediately wired the office for authority to hire a launch to board incoming vessels and do a certain amount of patrol work on the bay. This was instantly granted. After this, knowing that the steamer "City of Key

West" had arrived directly from Key West the day before, Thursday morning, August 31st, I went to the dock and notified the captain of the "City of Key West" of the existence of yellow fever in Key West. I also called at the purser's office and requested that he give me a copy of the passenger list of his last trip. This he did, and I found there had been two passengers destined for Miami. I then returned to my office, with the determination to look up those passengers, or such as had stopped in Miami, but, unfortunately, after a short search, finding the people had moved from their former residence, I was called to an obstetrical case, with which I was detained until late in the night. Early the following morning (September 2d) I completed my search, and after a two hours' hunt I was successful in locating both passengers. One I found well and around. The other, S. R. Anderson, was in bed, giving about the following clinical history: He had awakened some time Thursday night with a chill. He then had fever, and had remained in the house all day on Friday, and on Saturday he was still in the house, but able to get up and sit around the room, and then loll again on the bed. I informed him of the presence of yellow fever in Key West, and told him that I was afraid he might have the same trouble. He assured me that he had been around no sickness, and to his knowledge he had not been exposed, even if there was yellow fever in Key West. His own family had previously and during his absence had dengue. I told him I could not be positive of the nature of his attack, but requested that he would not allow any of the family to leave the house, nor any one from town to come in, until after I could positively decide. That night (Saturday, September 2d), after thinking it over, I employed William Lowe and John Sand, who were Key Westers and supposed to be immunes, placing them as guards over the premises, with instructions that they carefully guard the house, allow no one to enter or leave without my permission, and at the same time to do so with as little publicity as possible. I continued to visit the patient from two to four times a day, watching and noting his symptoms carefully. A great many times I found him sitting up, and each time assuring me that I need have no apprehension; that he had been much sicker many times in his life. He was absolutely positive that he could not have yellow fever. On Sunday I examined his urine and found no albumen. On Sunday afternoon he told me that he had eaten quite a quantity of vegetables and bacon for dinner, and also syrup and cakes for his supper. That night he had a vomiting spell, pulse became very weak, and his temperature went up. Having been

informed that the Assistant State Health Officer would arrive here on Monday evening, and knowing his skill and ability as a diagnostician in yellow fever, I decided to allow the case to remain in *statu quo* until his arrival. Monday I did not examine his urine, but visited him as usual. Monday night at 10 o'clock I met the train and received Assistant State Health Officer Horsey and Passed Assistant Surgeon Stimpson, of the United States Marine Hospital Service. I immediately communicated my fears to Dr. Horsey, and gave him the clinical history and charts of the patient. After talking the matter over, he decided that it would not be best to see the patient that night, but that we would see him early the next morning. We called on Tuesday morning, accompanied by Dr. Stimpson, who, by the way, said that he had never seen a case of yellow fever or dengue, but that he was here, and would do anything he could to assist, and if it was yellow fever he would like to see the case. After seeing the patient and getting a specimen of urine, we returned to my office, and again going over the clinical history, and examining the urine—which contained a good percentage of albumen—there was no longer any doubt.

We then held a council, and decided the best disposition to make of the patient would be to obtain a boat and remove him down the bay and disinfect and guard the premises. This was done. The patient and his entire family were placed on a schooner, which was anchored down the bay, immunes only being used in the removal. The house was thoroughly disinfected and kept closed and guarded, and afterwards, before the return of the family, was re-disinfected. Not only was the house disinfected, but the yard also was thoroughly cleaned, all trash being burned, the ground under the house and all over the yard thoroughly wetted with a bichloride solution and thoroughly coated with lime. There were other cases of fever in the neighborhood of Anderson's house at this time, and these were then seen by Assistant State Health Officer Horsey and Dr. Stimpson, both agreeing with me that they were dengue. I should mention that on Saturday afternoon, September 21, I received a telegram from Surgeon Carter, of the Marine Hospital Service, then at Key West, stating that a launch, with ten passengers, had escaped from Key West and left for the Florida Keys, and requesting me to look out for them. I immediately employed a launch and an experienced pilot and sent them in search of the refugees. They were caught off Elliott Key, brought up to the quarantine ground and there placed in quarantine and a new guard

placed over the boat to prevent any possibility of escape. Having served their time in detention, their baggage and boat were re-disinfected and they were allowed to land. I also, upon the advice of the Assistant State Health Officer, placed land guards at Cutler and Cocoanut Grove, and patrol launches in the bay, to intercept any possible refugees, Dr. Stimpson assuring me that the Marine Hospital Service would, at least, bear this expense. He telegraphed to Washington at once for this authority, but it was never given, and eventually the bills had to be paid by the State. I afterwards communicated with you, telling you of the expense we were incurring in this manner, and that I thought it necessary, and asking your sanction, which was given. After the decision that Anderson had yellow fever, I went to the City Council and laid the matter before them, telling them the importance of strict sanitation and careful oversight of future cases of sickness in the town. They readily agreed, and placed at our disposal three sanitary house-to-house patrolmen, whose duty it was to make a daily house-to-house inspection and report to my office all cases of sickness and locality and the sanitary and health condition of their respective portions of the town. This was continued for ten days. To be certain that there could be no cases of doubtful sickness, Dr. Stimpson and the writer made a house-to-house canvass. We did not find anything suspicious, and on the morning of September 16th we issued the following bulletin:

“MIAMI, FLA., September 16, 1899.

“Having completed a careful house-to-house inspection, and after close observation and examination of every case of sickness occurring in the city of Miami during the past ten (10) days, which is now the time elapsed since the discovery and isolation at quarantine in the bay, five miles below the city, of the one case of yellow fever imported by refugee from Key West, we hereby authorize the statement that there is not now, nor has there been, any other case of suspicious sickness in the city of Miami. The general health conditions are found to be exceptionally good.

J. L. HORSEY,
Assistant State Health Officer.

J. M. JACKSON, JR.,
Agent State Board of Health.

W. G. STIMPSON,
P. A. Surgeon, U. S. M. H. S.

"During this period of house-to-house inspection we made it a point, where a case of sickness was reported and no physician attending, to visit the case and make a diagnosis. We had requested the physicians of the city to report to Dr. Horsey anything that they might have that was in the least doubtful, and he would visit the party and express his judgment. During this whole time nothing suspicious occurred, and Dr. Horsey left Miami on the morning of September 17th, returning to Jacksonville. Dr. Stimpson visited the quarantine station and helped me to inspect such boats as arrived; he also visited such cases of mine as he liked, and assisted me in the examination of urine collected from different patients, for, I might here remark, that it was my custom both before and after the advent of the Anderson case, in all cases of dengue, to begin on the morning of the second day and examine their urine for at least three days, if not every day during the entire illness. In none of these cases of dengue was I able to get the slightest trace of albumen, either by the layer or the heat and nitric acid tests, picric acid test. All went well until the night of September 20th, when Mrs. Fowler visited my office and informed me that a Mr. Hargrove was sick in the Hotel Miami. While she did not know that there was much the matter, still thinking that I ought to know of all cases of sickness, she came to inform me, saying she would be better satisfied if I would call and see him. This I did, finding Hargrove with a temperature of 104 degrees and a pulse of 120, complaining of general aching all over; which is very much like the advent of dengue, and I prescribed for him. Having never been the gentleman's regular attendant he seemed rather reticent, and, when leaving, informed me that if he needed my services again he would send. Not wishing to use my official capacity to further my professional ends I did not call to see him until the morning of the 22d, when I was told by some of his friends that he was quite sick and in bed. I then dropped into the other physicians' office in town and quietly asked if they had been to see him. None having been, I decided that it was best to return and see him. I found that he had taken but little of the medicine I had left; bowels very much constipated, very weak, all pain gone, except frontal headache. I ordered a solution of rochelle salts and told him I would return again in the afternoon, requesting that he save me some urine that I might examine it. His pulse was so high at both visits on the 22d, I was unwilling to call it suspicious until I had made an examination of his urine, and there being but slight jaundice, although a very great injection of the eye. I

No. 71

Form No. 1091 a

Port of *Newport*

UNITED STATES OF AMERICA

BILL OF HEALTH

J. F. Richardson, Asst. Surg. U.S.M.H.S. (the person authorized to issue the bill), at the Port of *Newport, Cuba*, do hereby state that the vessel hereinafter named clears from this Port under the following circumstances:

Name of vessel, *Laura*; Nationality, *American*; Rig, *Steam Sloop*; Master, *Thomas*; Tonnage, gross, *144 1/2*; Net, *156 1/2*; Iron or wood, *Iron*; Number of compartments for cargo, *1*; For storage passengers, *0*; For crew, *1*; Name of Medical Officer, *J. F. Richardson*.

Number of officers, *4*; Number of members of officers' families, *—*; Number of crew, including petty officers, *7*; Number of passengers, cabin, *—*; Number of passengers, steerage, *—*; Number of persons on board, all told, *11*.

Port of departure, *Miami, Fla., U.S.A.*; Where last from, *Miami, Fla., U.S.A.*.

Number of cases of sickness, and character of same, during last voyage, *none*.

Number of cases of sickness and character of same while vessel was in this port, *none*.

Vessel engaged in, *Coastal*; Trade, and place between, *Newport* and *Miami, Fla., U.S.A.*.

Sanitary condition of vessel, *Good*.

Kitchen, sanitary history, and condition of cargo, *Good*.

Quantity and wholesomeness of water supply, *Miami, Good*.

Quantity and wholesomeness of food supply, *Good*.

Sanitary history and health of officers and crew, *Good*.

Sanitary history and health of passengers, cabin, *Good*.

Sanitary history and health of passengers, steerage, *Good*.

Sanitary history and condition of their effects, *Good*.

Prevailing diseases at port and vicinity, *Malaria, Dysentery, Pertussis*.

Location of vessel while discharging and loading—open bay, or wharf?

NUMBER OF CASES AND DEATHS FROM THE FOLLOWING-NAMED DISEASES DURING THE PAST TWO WEEKS:

DISEASE	NO. CASES	NO. DEATHS	REMARKS
Yellow Fever	<i>none</i>	<i>none</i>	
Acute Cholera	<i>none</i>	<i>none</i>	
Cholera, Nodosa, or Cholera	<i>none</i>	<i>none</i>	
Smallpox	<i>none</i>	<i>none</i>	
Typhus	<i>none</i>	<i>none</i>	
Plague	<i>none</i>	<i>none</i>	
Relapsing Fever	<i>none</i>	<i>none</i>	

I certify that the vessel has complied with the rules and regulations made under the act of February 15, 1893, and that the vessel leaves the Port bound for *Miami, Fla.* United States of America, on the *8th* day of *September*, 1899.



Signature of medical officer: *J. F. Richardson*
Assistant Surgeon, U.S.M.H.S.
U.S. Quarantine Officer

returned in the afternoon and was still unable to get any urine, but he seemed then to have a slight delirium, and was more jaundiced. I then placed two immune guards over the patient with instructions to allow no one to see him until the case had been diagnosed. I returned to Dr. Stimpson's office, communicated to him my fears that there was a possible case and requested that he visit the patient. After numerous visits and trials, about 9 p. m. of the 22d, we obtained four ounces of urine, which upon examination, revealed a quantity of albumen. I immediately wired Dr. Horsey, the Assistant State Health Officer, requesting that he return at once, if possible, by special train. Not receiving an answer by 9 o'clock the next morning, I wired Key West, requesting you to come. The case remained about the same Saturday (the 23d), and on the arrival of Dr. Horsey on the 10:30 p. m. train he assumed charge. Dr. Horsey, after seeing the case that night, directed that guards be placed around the hotel, in that way catching every one who was in the house. This was done and all persons kept within the house until removed down the bay in quarantine several days later, where they were held under guard for ten days. Overtures were made to Hargrove and the same boat that Anderson was isolated on was prepared to carry him down the bay, but he refused to be removed, saying he would go only by force, and that force he would resist to the bitter end. There was a great deal of doubt as to whether Hargrove really had yellow fever, some asserting that he had Bright's disease, and the failure to get the low pulse—as in cases of typical yellow fever—and the rumor of his heavy drinking and having had some agnadiante immediately prior to his taking sick, and the presence of dengue in town, all combined, made, to my mind, a confusion of facts which rendered it extremely doubtful whether or not Hargrove had yellow fever. In fact, I said to Dr. Horsey that when other cases occurred from the Hargrove case then would I believe that Hargrove had yellow fever—with all due deference to his diagnosis and his experience with the disease. The case was closely watched throughout Sunday, and the Monday following Dr. Horsey pronounced it a case of yellow fever. The man died with black vomit the following day (Tuesday), and was buried within five hours, none but immunes having any connection with his funeral. It is impossible to connect Hargrove's case in any way with the Anderson case (occurring three weeks previously and about a half mile distant in point of residences). Nor had Hargrove been out of Miami, to the best of my knowledge and the information

obtainable, during the month prior to his illness. We investigated closely for some source of infection. This we were unable to find, and I can only give as the possible source of infection the steamer "Laura," a cattle boat which arrived in Miami on September 10th, and was at once inspected and held two days to complete her time after disinfection at Nuevitas. This boat was inspected by both Doctors Horsey and Simpson, who accompanied me on each visit. Dr. Horsey, upon seeing the boat and noticing how mechanically clean she was, decided that it was not necessary to redisinfect, as per State Health Officer's orders, which had just been received, requiring all vessels from national quarantine stations to be disinfected because of the assumption that yellow fever at Key West had gained entrance into Key West through carelessness on the part of the Government officers at Havana. Accompanying this I enclose you the bill of health of the "Laura" and her disinfection certificate, upon which, the Government guarantee of safety, this vessel was entered at Miami without redisinfection. My reason for ascribing the source of infection to the "Laura" is due to the fact that Hargrove was known not to have visited anywhere in the Anderson neighborhood, but he is known to have frequented the "Laura" while she was in this port, between the 13th and 15th, and being taken sick on the 20th—about the specified time for the incubation of the disease—it would naturally lead to the impression, where no other possible source of infection could be found, that he must have received the poison causing his death from the "Laura." The crew of the "Laura," being immunes, will not support the argument that the vessel itself was not infected. Hargrove was known to have been on and spent the evening or part of the night on the "Laura"—hours so fruitful for contracting this disease. There are two people in Miami who believe that they also contracted and had yellow fever in a light form, without medical attendance, a short time after they had visited the "Laura," and here is another possible source of the introduction of the disease. These parties, however, are known to have been on the "Laura" only during sunlight hours. The house-to-house inspections were immediately resumed on suspecting the sickness from which Hargrove was ailing, namely, on Monday (September 25th), the day Dr. Horsey decided that Hargrove had yellow fever, and were maintained the usual period without revealing anything of suspicious nature, and I again thought that Miami had passed through the experience that had followed the Anderson case, and that owing to our splendid sanitary conditions and the precautions exercised, we had escaped

Form 19211

CERTIFICATE OF DISINFECTION.

THIS CERTIFICATE WHEN GIVEN SHALL BE CONSIDERED PART OF THE BILL OF HEALTH.

United States Consulate,

Port of *Mucrites, Cuba*

September 8th, 1899

I hereby certify that I have this day personally supervised the disinfection of the Steamship *Lama* about to clear for the port of *Miami, Fla., U.S.A.* and that the vessel and all things on board requiring it have been disinfected in accordance with the regulations of the Secretary of the Treasury. *Disinfection complete at 9 A.M.*



United States Consul.

T. F. Richardson
Assistant Surgeon, U. S. Marine-Hospital Service.

any spread from these foci. On the Monday following the discontinuance of the last house-to-house inspections, I was requested by one of the local physicians to see one of his cases with him "in consultaton." Being at a very early hour, I postponed the consultation until 9 a. m. After having a talk with the physician in question, I decided to request Dr. Horsey to also see the patient, which was done. While I was absent from my office they went to see the case without me. Upon returning to the office Dr. Horsey told me that he considered the case suspicious, and he invited Drs. Van Esdorf and Stimpson to see the case with him. They all decided that it was suspicious, and when he died that afternoon about 6 o'clock (the 16th of October), a post-mortem was determined upon, which was held that evening about 9 o'clock, by electric light. I was present at the autopsy, as were Drs. Horsey, Skaggs, Stimpson and Van Esdorf. Dr. Horsey used the knife and we were onlookers. There was considerable difference of opinion as to what the post-mortem examination revealed. I herewith append the notes as taken by me at this necropsy. I did not then from the autopsy, nor do I now, from following the history of the case and subsequent events, believe that Mr. Flye died of yellow fever, for of all the exposures of non-immunes to this case there is none that I can trace who had an attack of yellow fever that could in any way be associated with Mr. Flye. I so wired you at the time and asked you to come here, if quarantine, which had been instituted the night before, had been placed upon Miami purely on the Flye case. Soon after or about the time of the death of Hargrove, Dr. Van Esdorf, of the United States Marine Hospital Service, was ordered to Miami as a yellow fever "expert," and from the arrival of this gentleman or soon after his arrival, every case of sickness appears to have been looked upon by him as suspicious. In fact, it was very apparent to me that he came here predetermined to find yellow fever. He, as well as Dr. Stimpson, was shown every possible courtesy, and were told to use the office as their own, and all my charts, clinical records and such matters of history as I had kept during the dengue epidemic were placed at their disposal. They were invited to see the different cases I had under treatment, and to visit them at any time they might deem best, for if we had yellow fever in Miami or anything but dengue, I was anxious to know it, for as an official of the State Board of Health I was under an obligation to the balance of the State even more than to Miami. All went very well, and I thought we were getting along very amicably until one day when they

came into my office and communicated to me their suspicions of a lady patient about 28 years old, who they suspected had yellow fever, based principally upon the statement of the patient that she had been having black stools, and when I told them that the patient had been taking calomel, and would very likely have black stools, you can but imagine my surprise when I was sneered at and met with the reply, "I don't believe it." Up to this time, as I said before, I had extended them every courtesy, but when I was met with both language and action that I was wilfully or willingly lying, you cannot blame me for resenting it. I afterwards investigated this very patient, which I have a history of, and found that she had an attack of diarrhoea the day before she was taken sick, and that she walked 150 feet to the water closet to have these black stools upon which they were willing to base their suspicions. Following closely upon this, one of my patients visiting my office was rather indignant at the idea that these gentlemen would visit his house, request him to go to their office and when there, without my presence, endeavor to get a clinical history of his sickness some four weeks prior, by asking him leading questions, so, he said, that reflected upon the integrity of his professional advisor for the past four years. When I heard this I was more than doubly indignant, because I had given these Federal officers a very carefully kept chart and clinical history of this patient while he was sick. After hearing of this, and other similar actions and things done, I refrained from further professional consultations with these gentlemen. As I had shown these gentlemen typical cases of rash, of dengue, and also the examination of urine of these cases, I failed to see how, as I am reliably informed they could have said since leaving Miami, that yellow fever had existed here since last February. A number of these cases having dengue in July, August and September, and some of them as late as the date of Hargrove's illness, afterwards during the yellow fever epidemic, contracted and had typical cases of that disease, and were seen and so diagnosed by you. In proof of this assertion I beg to append a few charts of cases which had dengue and a few months or weeks later had yellow fever, also charts of a few typical cases of dengue occurring at different times during the epidemic.

Upon the arrival of Dr. Horsey on Saturday night (September 23d) and the placing of a guard on Hotel Miami, the citizens became somewhat alarmed and a general exodus was threatened. A few people began leaving the town almost immediately, some going by private conveyance, others on foot,

and still others who were not quite so timid, waited to take the morning train. Feeling sure that there was not other source of infection outside of the house containing the Hargrove case, and that to restrain the movement of the general public, as no matter where they might go, they had nothing in their systems that would carry danger or disease to other sections. This was afterwards borne out by the fact that none of these refugees sickened, and that most of them overcame their fear and returned to Miami in time to be encircled by the cordon established on the 16th of October.

After the institution of quarantine by the Assistant State Health Officer, on instructions from you, and prior to your arrival, Dr. R. D. Murray, of the Marine Hospital Service, visited Miami and was shown every courtesy and given every facility in his investigation. His report I then did not concur in, and while it may seem presumptuous in me, a novice in the disease, to disagree with a man of Dr. Murray's experience, still I did so then, candidly and honestly, and I do not believe now that I was entirely mistaken, nor have events demonstrated it. I have the highest regard and greatest esteem for that gentleman, as a man and as a physician, as I said to him at the time, I hoped he would not consider me rude or unprofessional in disagreeing with his diagnosis of some of his cases. When you arrived, on the night of October 19th, such cases as I had in my practice were presented for your examination. After your arrival (October 19th) and declaration of yellow fever, in epidemic form, in Miami, I was then subject to your orders, and my acts as an official were under your personal supervision, I will, therefore, not go into a further history of the epidemic, but leave you to state for yourself what occurred during your stay here.

Very respectfully yours,

J. M. JACKSON, JR., M. D.,

Agent State Board of Health.

DR. HORSEY'S REPORT.

FERNANDINA, FLA., January 15, 1900

Dr. Joseph Y. Porter, State Health Officer, Jacksonville Fla.

DEAR DOCTOR: I have the honor of submitting to you herewith my report, relative to the introduction of yellow fever infection, and the subsequent development and spread of the

disease at Miami, Fla. In obedience to your order of September 2d, 1899, I went to Miami for the purpose of instituting and perfecting necessary quarantine restrictions at that point, to prevent the ingress of yellow fever infection from Key West. Upon my arrival at Miami, on the night of September 4th, I was met by Dr. Jas. M. Jackson, who informed me that he had a suspicious case of fever under surveillance, in the person of a man named Anderson, who had recently arrived from Key West. I visited the case, and from the subjective symptoms present, and from the concise clinical notes kept by Dr. Jackson, I immediately made a diagnosis of yellow fever. This man and his entire family (wife and two daughters) were immediately removed from their home, placed on a small schooner, the *Drummer* which was chartered for the occasion, and the entire party sent down the bay, and placed in quarantine at a distance of about five miles from Miami. Upon the removal of these people, all of their beds and bed clothing was destroyed by fire. All other clothing was sterilized by steam and the house thoroughly disinfected, closed and put under guard. Anderson and his family were kept in quarantine for a period of eighteen days, and before returning to Miami all of their effects were again put through the process of steam sterilization.

At the time of the development of the Anderson case there existed in the immediate vicinity of his home several well marked cases of dengue fever. These cases had developed before Anderson arrived at Key West. These, with other cases of the same character which developed subsequently, were all watched very closely, and accurate clinical notes taken, but in none of them did any symptoms of suspicion appear, the cases all running the usual course of dengue and terminating in recovery.

Dengue fever had existed at Miami since about July 15th, and had been during this time reported to you by Dr. Jackson, and in consequence of these reports I visited Miami early in August, in accordance with your order, for the purpose of investigation. The cases of disease seen by me at that time all presented the typical characteristics of dengue. These facts, in connection with the clinical notes taken by Dr. Jackson, of fifty or more cases which had occurred previously, made the diagnosis of dengue positive, and I so reported to you. Subsequent to my visit and report, or during the latter part of August, you had the opportunity to see and examine some of these cases of fever, and at the time concurred with Dr. Jackson and myself in the diagnosis made by us.

After the same termination of the Anderson case, and after

carefully watching the character of the sickness then existing at Miami, and for a period of fifteen days thereafter, I thought it safe to leave, and did so, on September 17th, then returning to Jacksonville. I was, however, recalled to Miami on September 22d, by telegram from Dr. Jackson, this time to see and examine a case presenting symptoms of suspicion.

This was the case of Hargrove. This man resided at the Hotel Miami. He had been taken sick suddenly with chill at 2 o'clock on the morning of September 20th. Dr. Jackson saw the case on the night of September 20th; did not see the patient on September 21st, but saw him again on September 22d; at this time he recognized the suspicious nature of the case, and immediately put the patient under guard. Upon my arrival on the night of September 23d I put a guard around the hotel, and thereby caught all the inmates, to the number of ten (10). These were sent down the bay and put in quarantine on the steamer *Santa Lucia*, and kept there for a period of ten days. Hargrove remained at the hotel, refusing to be moved. He died on the morning of September 26th, and was buried within six (6) hours after death, the funeral being conducted by entirely immune persons. After the death of Hargrove the Hotel Miami was closed and kept under guard; at the same time the entire house and its contents were disinfected by use of sulphur, formalin and bichloride mercury, and every precaution taken to prevent the further spread of the infection from this focus.

The source of infection of this case was at first very uncertain. No possible connection could be traced between the Anderson and Hargrove cases, and at first I was at a loss at account for the infection, but after a careful and thorough investigation, I became convinced that Hargrove received his case and the infection from the cattle steamer "*Laura*," which arrived at Miami on September 13th from Nuevitas, Cuba.

The history of this vessel upon arrival, as set forth in her papers, was as follows: Bill of Health issued September 8th, by T. F. Richardson, Asst. Surgeon U. S. Marine Hospital Service, that the sanitary condition of the vessel and of the crew was good. A certificate of disinfection, also issued by the same officer, certifying that "quarantine regulations of the Treasury Department" had been fully complied with, and the vessel disinfected in accordance with same. This vessel was given pratique and admitted to the port upon these documents. Up to this time and previous thereto, no yellow fever had been reported as existing at Nuevitas, but, strange to re-

late, in the "Public Health Reports," issued by the Marine Hospital Service, under date of December 22d, there appears a telegram dated September 17th, stating that Assistant Surgeon Richardson is reported ill with yellow fever. That this information was correct, I quote from report of Dr. Richardson himself, published in Public Health Reports, October 13th, 1899, in which he says: "One case of yellow fever (that of myself) was reported on September 16th; no other cases have been reported, and it is improbable that any others will be." This information, following just eight (8) days after that set forth in the bill of health of the "Laura," rather disproves the former, and proves very conclusively that at the time of the departure of the "Laura" from Nuevitas that there was yellow fever infection there, and, in fact, that Dr. Richardson himself became infected makes it almost certain that the "Laura" was also infected and was the source of infection of Miami. It was a well known fact that Hargrove had frequent intercourse with the "Laura" while she remained in port, and that he visited the vessel on the night of September 14th, and remained on board for a considerable time. In proof of this I have the following written statements and certificates from responsible persons in Miami. Mr. Phillip DeHoff, who had charge of the Hotel Miami at the time of Hargrove's illness and death, gives the following certificate:

To Whom it May Concern: This is to certify that I was personally and well acquainted with Mr. I. R. Hargrove, and have personal knowledge of his visit to the cattle ship "Laura" on September 14th, 1899, after dark, and that he told me that he went all through the ship.

(Signed) PHILLIP DEHOFF.

L. E. Jeffries, a hack driver at Miami, makes the following statement:

To Whom it May Concern: I hereby certify that I am a hack driver in the city of Miami, and further, that I drove one I. R. Hargrove, well known to me, in my hack, on Thursday afternoon, September 14th, 1899, from the Miami Hotel, in the city of Miami, to the cattle boat "Laura," which was then lying at the steamship wharf. I saw him go on board the "Laura," where he remained for considerable time.

(Signed) L. E. JEFFRIES.

Mrs. Corrie H. Fowler, of Miami, a friend of Hargrove, states that Hargrove related to her an interesting account of his visit to "a cattle boat." After the death and burial of Hargrove a careful house-to-house inspection was made daily

for a period of fifteen days. During this time no case of suspicious sickness was found, and it was not until October 16th that any sickness of suspicious nature was reported. On this date I was asked to visit a patient in the practice of one of the local physicians. This was the case of Mr. Flye, who had been sick for a period of seven days. When I first saw this case I found the patient in a condition of uræmic coma, almost pulseless, and bladder distended with retained urine; in fact, the man was dying, and did die in a few hours after I had seen him. This case presented the typical symptoms of yellow fever, and I immediately reported it to you by wire. In answer to this report you ordered me to at once place rigid quarantine restrictions on travel to and from Miami, which order was fully complied with. The subsequent development and spread of the disease you are conversant with.

In my opinion, Hargrove was the first case of yellow fever; he infected the Hotel Miami, and the infection spread slowly from this *focus* until it became general. And my further opinion is that the steamer "Laura" was the source of infection of the Hargrove case.

Yours respectfully,

J. LOUIS HORSEY, M. D.,
Assistant State Health Officer.

DR. WEEDON'S REPORT.

TAMPA, FLA., March 11, 1900.

Dr. Joseph Y. Porter, State Health Officer, Miami, Fla.:

DEAR SIR: During the year 1899 my services as agent for the State Board of Health were called upon to suppress both smallpox and yellow fever. In April a case of smallpox occurred in the midst of the negro settlement in Tampa. The case came from a phosphate camp in an adjoining county. The Health Department of the city undertook to vaccinate the negro population, but for some reason failed to remove the case to the pest house, which two years previous was purchased, at my request, by the county and city jointly, for the purpose of isolation of any such case that might occur. The method used for vaccinating proved a failure, and only served to arouse opposition to the measure. The disease spread, and after four weeks there were probably twenty or thirty cases in the city, when the State Board was requested to assume control and suppress it. I had little trouble in so doing, after

conciliating the negroes to submit to vaccination. I removed the sick out of the city to the pesthouse, disinfected their houses, and vaccinated practically the entire negro population, some three thousand. There were approximately fifty cases in all. After that not a case occurred during the year.

On September 4th, I was asked to see a case of fever at Port Tampa City, in the hospital of the Marine Hospital Service. This case I suspected to be yellow fever and instituted the necessary precautions pending a possible diagnosis, which I was able to make on the 7th as being yellow fever. On the 10th I made a post-mortem examination, which verified my diagnosis, and instituted quarantine. This case occurred in a drunken sailor named Walch. I have been able to ascertain that he had not been away from Port Tampa for two months, except once, when he was employed on steamer "Tarpon" while towing a cattle schooner to within forty miles of Havana, from whence she returned, without making any port, to Port Tampa. The man was taken sick while firing on the tug Catharine, which was tending the dredge working in the bay, and was removed to the hospital at Port Tampa City.

It probably will never be known positively from whence came the infection, but reasoning by exclusion, I am forced to the opinion that the disease could have come from no other place than Havana. If yellow fever existed at both Havana and Key West, the only ports with which we were having any connection where fever existed. I secured of the custom house a list of all vessels entering Port Tampa, for two months prior to the Walch case. During this time there was practically no intercourse with Key West, whereas an extensive cattle shipping business was going on between Port Tampa and Havana. The steamer "Panita," as well as many sailing vessels were engaged in this trade all summer. After a careful inquiry concerning Walch's whereabouts for two weeks prior to his becoming sick, I learned that he was continuously on the docks, and 'twas his custom to beg for spirits wherever he thought it could be found. During the week prior to his illness he was seen loafing about two cattle barges that were lying in the slip awaiting their cargoes of cattle. I do not remember the names of these barges, but they were old wooden vessels from Havana, and were in tow by the steam tug "Guillermo Lopez." The crews of these vessels were a drinking lot and Walch was in their company. I believed that Walch contracted his illness aboard one of these barges, which opinion was strengthened when I subsequently learned that yellow fever has appeared on one of

them, on the return trip from here and while in Havana harbor. In speaking with Dr. H. R. Carter, of the Marine Hospital Service, about the matter later, he assured me, after inquiry on his part that 'twas a mistake; that no yellow fever developed on either of these barges after leaving here. I am sure I can safely exclude Key West from being the source of Walch's case of yellow fever. I am also sure that Havana was the only other port with which we were connected that had yellow fever. I can exclude the steamers of the Plant Line as being the bearers of infection, from the fact that no case occurred on them or in their crews or passengers which were carried. So it only remains to attach the infection to some of these cattle boats, and probably to the "Guillermo Lopez" and her barges, even though the disease did not occur on them subsequently, as reported.

From September 10th, the date of the death of Walch, until the first week in October, no other case occurred, and by your permission quarantine was removed. During the first week in October a case of fever developed on the docks, two miles from the place where the first case was located. The case for some time baffled a positive diagnosis of yellow fever. In fact, even now I must admit it was far from being a typical case of yellow fever, though there were symptoms which led me to take the precaution of isolation, which the surroundings permitted to be done to my satisfaction. The case, as was the former, was under the care of Dr. G. H. Altree, was in the person of a Mr. Epps, who worked in the office of the agent of the Plant Steamship Company, and he had not been absent from Port Tampa and Port Tampa City for several months. Quarantine was not instituted, though I came to the opinion that it was probably yellow fever, my reasons being, first, that the case admitted of some doubt, and secondly, because of the apparently sufficient isolation of the case. Disinfection methods were adopted that were as perfect as I could desire, and no subsequent case occurred in the building adjacent to the case, or any who came in contact. There were not reported to me any other cases that would elicit suspicion of yellow fever, either on the docks or at Port Tampa City, though there were, according to Dr. Altree, the usual quota of malarial fever incident to the place and season, until November 12th, when I was asked to see a case which admitted of some doubt in the mind of Dr. Altree. I went with him and saw the case, and found a man in a dying condition, with all the symptoms of yellow fever. This man was a bartender at Port Tampa City. He died the night of the 12th, having had black vomit and suppression of urine. During this same

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visit to Port Tampa City I saw two other cases, which I diagnosed as yellow fever, in the practice of Dr. Altree. The next day I again placed quarantine on Port Tampa City and the docks as well. This action provoked great dissatisfaction on the part of all, believing, as they seemed to, that there was no yellow fever there. The municipal authorities, as well as the superintendent of the Plant Steamship Company, bitterly opposed the measure, and requested the Surgeon General of the Marine Hospital Service to send there some one experienced in yellow fever diagnosis. Dr. H. R. Carter arrived on the scene in a few days, as also did Dr. Brunner, of Savannah, Ga., who was, I learned, also requested to come. These gentlemen bore out my diagnosis of yellow fever in the three cases that they saw, and, upon the clinical history of several other cases which were not seen by me, were of the opinion that they were, as well, yellow fever. One of these cases which they saw was a merchant of Port Tampa City, who, while visiting his brother, who resided at Tampa, had been taken sick with a chill, at night, some days previous, and returned to Port Tampa City. After being ill for two days at Port Tampa City, he again returned to Tampa, to the home of his brother. His name is Barker. On discovering this fact, I immediately, before he spent a night in Tampa, had him returned again to his house at Port Tampa City. Up to this time I had not seen this case, but considered him possibly a case of yellow fever. I had the family of his brother removed from the house, kept them under surveillance for the requisite time, and disinfected the house with formaldehyde. On the following day I saw the man and diagnosed yellow fever. Drs. Carter and Brunner saw this case subsequently and pronounced it yellow fever. The disease was not contracted in Tampa from this case, nor did any case develop at Tampa, to my knowledge, at any time. From the clinical records of several more cases seen and treated by Dr. Altree, who is the City Health Officer of Port Tampa City, as well as an acting assistant surgeon, Marine Hospital Service, I now judge them to have been yellow fever. These cases were not at the time considered by him as being suspicious, and were not reported to me. They occurred both before and during the time quarantine was in force. After believing that no case had occurred for three weeks, quarantine was again removed. At this time the weather was quite cool, and it was upon my request of you

that the restrictions were again removed the first week in December.

Very truly,
(Signed) L. W. WEEDON,
Agent State Board of Health.

From the foregoing it will be seen that while the health of the State for 1899 did not attain the usual standard, yet the death rate was not higher in the total mortality for the year, being but 10.23 per thousand of population, against 10.55, the average for the past several years. The more than uncommon conditions which prevailed were confined entirely to localities in the southern portion of the State, and were due to circumstances over which the Board had either no control, or to have exercised control to anticipate would have most likely brought on such a friction with the Federal quarantine officials at Washington as to have seriously disturbed the commercial life of the State in the southern sections.

SMALLPOX, which, early in January, was again introduced from the commonwealths adjoining Florida on the north, caused some annoyance to the State Health authorities in Alachua, Marion, Duval and other counties, but in each instance the disease was held in abeyance, controlled and eradicated, and by the 25th of July the State was free from smallpox. The lack of funds in the Board's treasury at first occasioned some embarrassment in satisfactorily dealing with this question, but under an arrangement with the several municipalities affected, an agreement was arrived at by which the local government should care for the cases as they were imported, under the supervision of the State authority, and the State Board of Health would reimburse for the reasonable expenditure made, when the Legislature appropriated funds for the purpose. This course tended to allay fear, remove criticism of the Board in its unfortunate helpless financial condition, and to finally destroy the infection in the State. The estimate of the Board for necessary funds to meet the expenses of smallpox occurring in the fall of 1898 and the spring of 1899, was, in round numbers, \$20,000. This amount was intended to include the possibility of expenditures for this object, contracted under the agreement with the municipal and county governments, not accurately known to the Board, and embracing provision for future possible and probable unfortunates. The House Committee cut down the estimate, and

an appropriation of only \$15,000 was made. This, as had been anticipated, did not meet the demand of total expenditures, for the reasons above given. The various outbreaks and total and itemized accounts are shown elsewhere in this report.

SCARLET FEVER was reported from Duval, Escambia, Hillsborough, Orange, St. Johns, Marion and Monroe counties, but mild in type, and with no fatalities. In almost every instance it has been possible to trace the source of infection to importation from without the State. A notable feature in connection with the introduction of cases of this disease has lately occurred in its admission into Key West through a family embracing the Christian Science doctrine. This family boarded in New York City in a family hotel in early January, where scarlet fever had prevailed the year before, occupying the room where children, or a child, had passed through a seizure. Two of the children of the Key West family had scarlet fever in this room, one quite seriously, so it is reported, and was in the desquamating stage of the disease when they returned to their Florida home (Key West). A child living on the opposite side of the street, and playing with these children, sickened in two weeks, and has, at this writing a typical seizure of scarlet fever. This is mentioned, because no report was made to the State or local health authorities when this family returned to Key West, due to the peculiar belief of this sect, and because the tolerance of this doctrine by the State will in future be likely to cause not only annoyance to the health authorities, but may prove disastrous in many particulars, too evident to be enumerated at length. Besides being a direct violation of the State health statutes to bring into the State of Florida any contagious or infectious disease, the concealment of such may be the means of disseminating and propagating serious epidemics, with attendant calamitous results. In all of these instances, although the diseases were types of an intensely contagious character, no anxiety was shown by the people, nor undue inquiry made for information of the office of the Board, which is always the case when the people for any reason became alarmed in health or sanitary matters.

In the matter of smallpox, the people were advised, urged and implored to be vaccinated, and this solicitation is still being pressed. Vaccine virus, pure and fresh, was offered, and is still being tendered, free of charge to all who would and will permit vaccination to be made. At the residence of the local representatives of the Board in the several counties, vaccination is performed free. Even more than this has been

done by the Board. A "Medical Special Agent" has been employed and sent to different points in the State, wherever smallpox has been reported, not only to vaccinate (free) the unprotected, but to counsel and advise those in control of men in mining or turpentine farming business, as to the proper methods to protect their employes, to properly disinfect premises and to destroy *fomites* of the disease after termination of a case or cases. At the present writing, smallpox tends to be generally prevalent over the entire State, but only among the unvaccinated, and therefore unprotected. It has been directly and repeatedly introduced from the States to the north of us, proof so clear that there is no surmise or conjecture on the subject. As soon as it is eradicated in one section, a fresh importation occurs from some where else, and, unlike the disease of last winter, it is now attacking whites, and is occasioning mortality among both races. The means for "stamping out" and exterminating smallpox is vaccination. When carefully performed the operation is free of danger to the individual, always successful in primary cases, and is protective. It is not practicable or feasible, for reasons of finance and sound judgment based upon scientific knowledge, and when the disease is so widely diffused, to isolate, guard and feed every case of smallpox occurring in the State. A statute passed by the last Legislature obligates the State Board of Health to care for this as well as for other contagious diseases, but it is not understood that where a protection is offered to any particular contagious disease, without cost or charge, and with but slight inconvenience, that, for reasons of prejudice or ignorance, this protection is refused, that the taxpayers of the State shall be placed to the expense of guards, isolation, nursing and feeding of those thus obstinate and careless of the welfare of themselves and their neighbors. An earnest protest is here made against spending the people's money in catering to such hurtful perverseness. The disposition is very strong, at this writing, to advise that, as the State offers in vaccination an undoubted protection against smallpox, which will be given free of cost and with but slight inconvenience—if the wish is to avoid smallpox, be vaccinated. If indifferent to the importance of this subject, or if refusing, then the responsibility and expense of care should not be placed upon the State or any individual community. It is regretted that candor compels the statement that at some of the mining and turpentine camps the agent of the Board who visited the camps for the purpose of vaccinating all employes, was refused—the ob-

jection being loss of time or service of the employe through a possibility of a sore arm for several days. Until the Legislatures of the different States of this country enact compulsory vaccination laws, and they are strictly enforced, smallpox will continue to prevail, and a vast amount of money will annually be expended in caring for cases occasioned by an ignorant and unprejudiced class in their foolish opposition against one of the greatest boons which has ever been given to mankind. A very admirable resolution and public intimation has been lately adopted and given out by the physicians of Ocala, Florida, to the citizens of that place. They declare that anyone sickening with smallpox through a refusal or indifference to repeated warnings to be vaccinated, will not receive from them medical attention. In other words, having pleaded and implored with the citizens of Ocala to protect themselves against smallpox by vaccination—which is offered free—they do not propose to have their practice interfered with and injured by attending smallpox patients, whose seizure is due to indifference, neglect to heed warnings, or foolish prejudice against vaccination. It is to be hoped that the press of the State will give this matter attention and that the people in their hustings, soon to be held throughout the State, will thoroughly discuss the question, and instruct their representatives to the next Legislature, in no uncertain terms, that obstinacy may be met by law, and efficient economy shall push aside a foolish sentiment against vaccination. There has yet to be reported to the office of the Board, of the presumable 300,000 individuals vaccinated in Florida—for that number of vaccine points have been freely distributed—a single one, in whom primary vaccination, successfully made, has afterwards experienced smallpox. On the other hand, the instances are many where the protected and unprotected, side by side, have been exposed, the unprotected contracting the disease, leaving those protected by vaccination free and unharmed. It is recognized that, as in all other matters, where the life and health of the people are concerned, those interested in protecting the people against their own unsanitary prejudices, must be patient and strive by educational and objective methods to win the confidence and trust of the opposition. Where so much of the wealth of the country is wasted in pondering to a foolish sentiment of opposition, it is thought that the time has come when a stand should be made by the health authorities in all the States, and action exacted of the law-maker to stop a waste of public money yearly given to the care of a disease which can be so easily prevented.

Dr. E. L. Stewart, who was appointed special sanitary inspector and assistant to the State Health Officer, is deserving of praise and commendation for the ability, special aptness and efficiency with which he has conducted the work of eradicating smallpox in the different sections to which he has been sent. It is a pleasure for the State Health Officer to officially invite the attention of the Board to his most satisfactory conduction of affairs and treatment of a very difficult problem, the execution of which he has accomplished without friction.

Before leaving this subject of smallpox, permission is requested to quote an admirable editorial from the February 10th, 1900, issue of The Journal of the American Medical Association, descriptive of the points of difference to be carefully noted by the profession, when called upon to differentiate in eruptive diseases. So many errors have occurred and so much annoyance has resulted from erroneous and mistaken diagnoses, that no apology is offered for introducing the text of this editorial into the body of this report:

"In the presence of an epidemic the diagnosis of smallpox may in general be unattended with difficulty, but when the disease occurs only in sporadic instances, doubt may often reasonably arise, and mistake may not always be avoidable. That error should be made at the present day in the diagnosis, ought not to be a matter for harsh criticism, when it is considered that smallpox is comparatively rare, and many, particularly among more recent practitioners, have never had the opportunity of seeing a case of this disease. The action of the Philadelphia authorities recently, in response to an appeal by the County Medical Society, in opening the wards of the Municipal Hospital for Contagious Diseases to the instruction of undergraduates of the various medical schools, under the supervision of the physician in chief, is therefore a matter for sincere congratulation, and is a credit to the intelligence and the public spirit of those with whom lay the power to withhold or to grant the desired concession.

"Through the beneficent influence of vaccination; smallpox is rare, even in the large cities of the world, so that under the most favorable circumstances many practitioners may pass through a long and busy career without seeing a single case, to say nothing of the lack of clinical demonstration during the course of collegiate medical instruction. It is, therefore, as has been already stated, not surprising that cases of smallpox should be occasionally overlooked or mistaken for other disease, and vice versa. The condition could not well be otherwise. It is worthy of mention, further, that by reason of

the wide diffusion of vaccination, even when the disease occurs, it does not always present the classic clinical picture. The frightful epidemics of the past are no longer met with in civilized communities, and both sporadic cases and epidemics and epidemics often present a degree of mildness that renders the confounding of smallpox with other diseases exceedingly easy.

"In a typical case, after a period of incubation of about twelve days, the attack usually sets in with a rigor or a succession of chills. Children may exhibit convulsions, delirium or coma. The temperature at once rises to a considerable elevation, and the pulse and respiration are accelerated. Headache and pain in the back and extremities are often present, and the physical prostration may be profound. The appetite is lost, thirst is increased, and constipation usually exists; vomiting or retching, with epigastric pain, is common. Catarrhal symptoms may also be present. On the first, second or third day a rash may appear, sometimes diffuse and macular, like that of measles, at other times scarlatinaform and confined to limited portions of the body, particularly the hypogastric and the axillary regions; at still other times a diffuse red eruption appears on the trunk and the extremities within the first or second day, being soon followed by the lesions of hemorrhagic smallpox. Generally on the third day—sometimes earlier, sometimes later, the typical exanthem of variola makes its appearance, often earliest on exposed parts of the body, as the face and the extremities. For a short time it is macular, but it soon becomes papular, then vesicular, and finally pustular, and it exhibits throughout a peculiar shot-like hardness. As a rule, a central depression or umbilication is present, and the lesion is surrounded by an area of redness. The pock is constituted of a number of compartments or loculi, so that its contents are not wholly discharged and it does not collapse on puncture. The mucous membranes may be the seat of grayish or whitish elevated spots that soon become transformed into excoriations. The pustules undergo desiccation or rupture on about the eighth or ninth day. If the true skin has not been involved, the crusts fall off about the fifteenth or sixteenth day, leaving purplish red stains; otherwise sloughing takes place on the eighteenth or nineteenth day, leaving granulated surfaces that undergo cicatrization and are at first brownish, but ultimately become white. The initial fever subsides shortly after the eruption has appeared and the constitutional symptoms moderate at the same time. At the end of the three or four days,

however, with the onset of pustulation, the febrile manifestations are renewed.

"The disease in the differentiation between which and smallpox the greatest difficulty is likely to be encountered, is chicken pox. In fact, there was time when the two diseases were considered identical, but there is abundant and conclusive evidence against this view. In the first place, typical chicken pox may occur in those who have had smallpox or have been vaccinated; and an attack of the disease, while it confers immunity to chicken pox, does not protect in the slightest against smallpox or vaccina. Then, each disease gives rise only to cases of its kind. Further, the eruption of chicken pox begins as a series of small, slightly acuminate red spots, which at first disappear on pressure. In a few hours these become transformed into round or oval, transparent, tense vesicles, about as large as split peas. These sometimes have a red base, although they are at times seated on a colorless surface. They appear most commonly and in greatest number on the trunk and covered portions of the body; usually they are superficial, have no thickened floor, are generally not umbilicated, do not present a number of loculi, and when pricked, collapse almost completely; their fluid contents become opalescent, but not purulent; they begin to undergo desiccation in from twelve to twenty-four hours; thin brownish yellow scabs form, which in a few days crumble and fall away, leaving reddened pigmented spots, and sometimes transient and superficial cicatrices. In contradistinction to the eruption of smallpox, that of chicken pox generally appears in successive crops in the course of three or four days or a week, and in a single case all the different phases of the eruption may be present at the same time. The constitutional symptoms generally are exceedingly mild, and the temperature does not fall when the eruption appears, as it does in smallpox. The disease occurs almost exclusively in children, although many instances have been observed in adults. In this connection it should be borne in mind that smallpox also was largely a disease of children until the beneficent effects of vaccination almost revolutionized the incidence of the disease.

"The primary eruption of smallpox may resemble that of measles, but the latter usually appears the later, and with its appearance the temperature, which originally had been high and had declined, again rises, while with the appearance of the papules of the eruption proper of smallpox the temperature declines. The eruption of measles further remains essentially papular throughout, while that of smallpox becomes

successively vesicular and pustular. Catarrhal symptoms are earlier and usually more pronounced in measles than in smallpox. The latter is the longer disease.

"There may be a close resemblance between typhus fever and smallpox at the beginning of each disease, but the eruption of the latter appears a day or two later than that of the former, usually avoids the face, does not become pustular, is often in part petechial, and the temperature does not decline with its appearance. The total duration of typhus fever is considerably less than that of smallpox.

"In the headache, the pain in the back and the extremities and the febrile symptoms, typhoid fever may at first be suggested in a case of smallpox. Epistaxis and diarrhoea are, however, likely to be wanting in the latter, the onset of which is usually abrupt, while that of typhoid fever is insidious and gradual. Apart from the marked differences in the character and the course of the eruption, that of smallpox appears earlier than that of typhoid fever, and its appearance is attended with decline in temperature and subsidence of the other febrile symptoms. The diazo reaction of the urine and the Gruber-Widal reaction of the blood are peculiar to typhoid fever, and the subsequent course of the two diseases is sufficiently distinct to prevent mistake.

"The scarlatinaform rash, sometimes present early in cases of smallpox, and which may be suggestive of scarlet fever, is generally replaced on the third or fourth day by papules, which in turn become vesicles and pustules. Rupture and desiccation occur in smallpox, and desquamation often in large flakes or sheets in scarlet fever. Further, sore throat, with deposits on the tonsils or in the pharynx, enlarged cervical or submaxillary lymphatic glands, and a 'strawberry tongue,' are peculiar to scarlet fever; whereas in smallpox headache and backache are the more conspicuous.

"The rash of erysipealas differs from the early roseola of smallpox, in being circumscribed and indurated and not succeeded by an eruption of papules, vesicles and pustules, but terminating in desquamation, sometimes after the formation of blebs.

"Contagious impetigo is an afebrile cutaneous disorder, attended from the onset with vesico-pustules on apparently healthy skin. The lesion is large, flat and superficial, and on disappearing leaves no scar. The disease is communicated only by contact or direct inoculation, and it may spread by auto-inoculation.

"The pustular syphilide may bear a close resemblance

to the eruption of smallpox, but it occurs in crops, is more superficial, is less indurated, is usually free from umbilication, exhibits no tendency to ulceration, is unattended with dermatitis, and is usually associated with a coppery discoloration of the skin, and other symptoms of syphilis, particularly granular enlargement. Much the same points of differentiation will aid in the separation of smallpox and other syphilitic eruptions.

"Smallpox and such disorders as cerebro spinal meningitis, influenza, rotheln, and various erythematous conditions of the skin, may for a time be confounded, but a careful scrutiny of the patient, a consideration of its associations, and the further development of the clinical picture, will in almost all cases clear up any doubt that there may have been in the diagnosis. The knowledge of the existence of other cases of smallpox, a history of exposure to infection, and the absence of evidence of successful vaccination and re-vaccination may be important factors in reaching a decision. Error can only be avoided, however, by being constantly on one's guard, and always prepared for the unexpected and the expected alike."

DENGUE, which prevailed so extensively in Key West in 1893, appeared in Miami, about the first of July, the past summer. Why, with unrestricted communication from Key West in 1893, and an augmented population at Miami, of some seven thousand soldiers, dengue should have passed over Miami in 1898, to appear in Jacksonville, where it is estimated there were some thousand or more cases, and should have appeared at Miami the past summer—and nowhere else in the State—is one of the unexplained mysteries connected with disease transmission. As Dr. Jackson explains in his report on the subject, the departure of the United States troops unfortunately did not carry the many physical ills which they brought with them. After their departure, measles and typhoid fever prevailed for some time among the native population, causing much suffering, and some mortality, and when dengue appeared, its advent was insidious and mild in character, occasioning but a few days' indisposition, so that at first it was not recognized. The pains and aches, however, soon demanded medical attention, when the character of the disorder became apparent. Immediately upon being notified of Dr. Jackson's apprehensions, the Assistant State Health Officer was dispatched to Miami to assist in arriving at a positive diagnosis. Dr. Horsey confirmed Dr. Jackson's opinion, and on the 24th of August the State Health Officer visited Miami and saw, with Dr. Jackson, a case in its

incipient invasion (Mr. Verner Townley), besides others in different stages of the disease. Therefore, when the statement is made—a statement borne out by bedside notes and clinical charts—that dengue did prevail in Miami in July, August and September, there seems to be no sensible reason in maintaining that the diagnosis was wrong. From the record and from an estimate of cases in the practice of others, Dr. Jackson computes the total number of dengue cases at Miami as about three hundred, and with no mortality.

YELLOW FEVER prevailed during the past fall at Key West and Miami. Some few cases were reported at Port Tampa city and on the Port Tampa docks, which are referred to by Dr. Weedon, the sanitary agent for Hillsborough county, in his report on the subject, and elsewhere noted. At Key West, from September 2d to October 19th, the State Health Officer had personal charge of the epidemic, and at Miami from October 20th to the removal of quarantine restrictions (January 15th, 1900). He was also in personal control of sanitary matters connected with the prevalence of yellow fever at that place. It was practicable for the State Health Officer to visit Port Tampa docks and city only once during the fall, when he saw in the Altree Hospital at Port Tampa city a case of fever reported to him as "doubtful." This case, after careful examination, was determined not to be yellow fever, which decision was confirmed a few days later by an autopsy, post mortem examination showing advanced stages of pulmonary tuberculosis. When cases of yellow fever were afterwards officially reported at Port Tampa city, it was not judicious, nor would the condition of affairs at Miami have warranted the State Officer in leaving Miami for another field of no more equal importance. The requests which the State Health Officer receives to come here, there and everywhere in the State, almost simultaneously, are certainly complimentary and flattering, and denote a degree of confidence on the part of the people which is appreciated and cannot be overvalued, yet it must be remembered that such omnipresent properties no human possesses, and it would seem to be demanded that where the greatest good is to be accomplished, and the language of the statute more adequately complied with, is the place at and from which the State Health Officer should control and direct operations. However, as soon as Dr. Weedon reported the existence of yellow fever, at Port Tampa city quarantine restrictions were imposed at that point and maintained until it was stated that the disease had ceased to exist. From what can be learned no general epidemic was ever reported nor anticipated, neither were the people of Tampa un-

duly apprehensive, which is in marked contrast to the disposition of former years, and tends to show the confidence of the people in general in the Board's ability to manage and control this infectious disorder. At Key West, the Board being slightly in funds, hospital accommodations were provided for the sick, as the statute permits, and, in fact, all the yellow fever sick were admitted on their own application, and none were refused. At Miami the generous philanthropy of Mr. Flagler and Mr. J. R. Parrott, his valuable coadjutor, erected a hospital, brought experienced nurses from Key West and Jacksonville, defraying all expense of the same, and in other ways contributed to the financial relief of the afflicted of that place. Nor did Mr. Flagler confine his Christian donations in this respect to Miami, as the following telegram from Mr. J. R. Parrott plainly indicates:

"ST. AUGUSTINE, FLA., October 30, 1899.

Dr. Joseph Y. Porter, State Health Officer, Miami, Fla.:

I have seen your wire to Mr. Flagler. By Mr. Flagler's authority I will provide funds for hospital, as suggested. Will you go ahead? If you need any financial assistance in your troubles in Key West, or any other point in Florida, do not hesitate to call on us.

(Signed) J. R. PARROTT."

The "Plant System" officials through Superintendent Dunham, also kindly and promptly offered transportation to nurses, to and from Tampa without individual expense to themselves or the Board.

At Key West, the State Board of Health exercised, through its executive officer, supervision of the hospital management, yet each physician was invited and permitted to professionally treat in the building, any patient who might be sent there by his medical attendant. It was purposed to confine this State charity to the poor and indigent sick, and to those who were friendless and alone, but, as before stated, none who sought admission were refused. At Miami, where the executive work was less than at Key West, and the compass of the epidemic very much smaller, consuming less of the entire attention of the State Health Officer, the hospital treatment was under his control—at the request of those admitted—and with gratifying results both to the patients and management. There were 1320 cases of yellow fever reported and recorded at Key West between August 31st and November 30th, with a mortality of 68. These figures, however, cannot be considered as accurate nor as representing the total number of cases, for the

reason that the epidemic was widespread among children and of such a mild character that many families, well acquainted with the general characteristics of the disease, and having a fair knowledge of the treatment demanded—which in children amounts to only simple and homelike remedies—did not call a physician and did not report the sick. It is not thought that there was any intention to conceal or to deceive by so doing, except in one instance, but the medical men were hard worked, and, besides, a professional visit meant money, and the expense was avoided by home treatment, which was usually successful. Various estimates have been made by those whose duties other than medical professional took them about the town during the epidemic period, and the total number of cases has been increased, from the reported and recorded number, some five hundred. This is thought to be a fair and conservative estimate, rather in excess than below the number actually sick. On this estimate, a mortality of slightly over 4 per cent is not an excessive death rate during a yellow fever prevalence. The disease spread slowly at first, confining itself to the district of the city where introduced, but later its course was rapid and streets were swept of the non-immunes, until the whole inhabited portion of the island was covered.

At Miami the epidemic, commencing with the Hargrove case on September 22d, was exceedingly slow in its extension, and the hope was at first indulged that Miami, being an exceedingly clean town, of rock foundation and wind-swept, particularly at the beginning of the fever, that the life of the epidemic would be short. It ran, however, the usual ninety days and ceased. Neither did all those exposed contract the disease, for instances of most remarkable resistance were witnessed. There were 220 cases, with a mortality of 14. The experience of former years, which has also been noted by other observers, was confirmed in the epidemics of yellow fever the past year, that when the infection was not destroyed in the first one or two cases, the progress of the disease was uninterrupted for the period of ninety days. At Key West the first cases were recognized about the last of August, and the cessation of the epidemic may be said to have been on the last days of November. So, also, at Miami, the first case, Hargrove, was on the 22d of September, and the last case occurred on the 1st of January following. The medical features of the epidemics of yellow fever this year are both interesting and instructive and will be discussed in another paper, at the State Medical Association, before those medically concerned in the subjects of etiology and pathology.

The general public interest centers in the means taken to prevent a spread from Key West and Miami and Port Tampa City, and more particularly to the question of source of introduction into these places and the responsibility therefor. The disease was prevented from spreading from the initial points invaded by *cordons sanitaires*, more particularly known as quarantines, both maritime and land. That yellow fever did not escape from those points to others in the State answers quite effectually the criticisms indulged in by a few sceptics as to the efficiency of the system adopted. At Key West the patrol was by water, the expense of which was borne by the Federal Government, by and with the consent and under the supervision of the State Health authorities. Every boat or person leaving the island for any purpose whatsoever, or for any point, was inspected and passed upon by the State Health Officer, and this inspection was afterwards verified by an officer of the Marine Hospital Service, who, under instructions from the State Health Officer, reinspected vessels on leaving the harbor. Considering the immense water fleet which Key West supports in her fishing, sponging, wood and key farming trade, some idea can be formed of the magnitude of the work devolving upon the executive officer of the Board in keeping an intelligent watchfulness over the movement of individuals. That local trade might be safely fostered and the necessities of the people in their daily wants be sustained, the neighboring keys on the east and west coasts were considered as within the infectible territory, and were quarantined from the mainland of the State. On the east side, where the settlements on the keys were larger and of a diverse population, many of whom are non-immune as to yellow fever, this precaution against communication with the State proper was highly necessary, that the farming interests on the keys might not suffer by being cut off from communication with Key West, the principal base of market and supply to the inhabitants. Therefore, when the representative of the Supervising Surgeon General of the Marine Hospital Service, who had been sent to Miami for the purpose of observation, requested to be permitted to assist in the work of excluding yellow fever from Miami via Key West, he was very willingly accorded the authority to institute a water patrol against Key West and Key Largo and keys to the southward. Every assistance was given Past Assistant Surgeon Stimpson in this work by the local representatives of the State Board of Health at Miami, and quite an elaborate and costly service was placed in operation by him. This action of Dr. Stimpson was afterwards, unfortunately,

repudiated by Supervising Surgeon General Wyman, and the onus of work and expense had subsequently to be borne by the State Board of Health.

Arriving at Miami late Friday night, the 20th of October, the next day and Sunday were spent in investigating cases of "fever," and on Sunday afternoon, the 22d, the following statement was given to the public:

EXECUTIVE OFFICE,)
STATE BOARD OF HEALTH OF FLORIDA,)
MIAMI, FLA., October 22, 1899.)

To the Public of Miami:

After a careful examination of many of the cases of fever, the State Health Officer announces the existence of yellow fever in Miami. Five distinct cases of yellow fever have been seen, and from clinical histories submitted there are doubtless several others. The infection is distributed over the town, mild in character, but unmistakable in recognition. To limit the spread of and destroy the infection as rapidly as possible, a depopulation of Miami is recommended. If fifty or more persons will leave for Hendersonville, N. C., which place will admit yellow fever refugees from this section, a special through train will be provided by the East Coast Railway System. A less number than fifty will not be taken by connecting lines at Jacksonville. As soon as possible a detention camp for refugees will be provided at a convenient point for those who cannot go as far as Hendersonville, N. C. The quarantine of Miami and the surveillance of this section as far north as New River (Fort Lauderdale) will be maintained as rigidly as human agency can effect it.

JOSEPH Y. PORTER,
State Health Officer.

Advising a depopulation of the place to prevent the spread of the disease and to check the epidemic, a water camp was rapidly established on the steamer "Santa Lucia," which was anchored down the bay, and around which were gathered various launches and sailboats of private parties, thus affording an accommodation for sixty odd persons. This camp, which was named "Camp Francis P. Fleming," was placed under the charge of Assistant State Health Officer Horsey, and was admirably managed. That persons availing themselves of the hospitality of the State, in this particular, were satisfied with the treatment received is borne out by the following testimonial presented to the management when the camp was discontinued, after ten days' service:

"DETENTION CAMP FRANCIS P. FLEMING,)
QUARANTINE STATION,)
STEAMER SANTA LUCIA, November 6, 1899.)

We, the undersigned, desire to express our appreciation of the generous treatment accorded us by the officers of the State Board of Health while in the quarantine detention camp on board the steamer "Santa Lucia," in Biscayne Bay. All of our wants have been most liberally supplied, the accommodation much better than we had a right to expect, and, notwithstanding some slight discomfort caused by inclement weather and the tedium that would naturally attach to our isolated position, we do not leave the "Santa Lucia" without regret.

From our experience during the epidemic while at Miami and in quarantine, we heartily endorse the methods of the State Board of Health under the excellent management of Dr. Porter, and trust that the same will be permanently maintained as a State institution.

The thanks of the refugees are particularly extended to Dr. Horsey, under whose charge we have been placed for his uniform courtesy and kindness, and to whose untiring vigilance and medical skill is largely due to the fact that we have passed the quarantine period without infection, and leave the steamer in the best of health. We also commend the employes of the camp for their uniform politeness and attention to our every want."

With the establishment of "Camp Fleming," a request was made of the Marine Hospital Service for a land detention camp, within convenient distance of Miami, for refugees of both races desiring to leave the infected territory. With the assistance of the State Health authorities, a site was secured at Fulford, a small railroad siding on the East Coast railroad, about twelve miles from Miami. This camp was continued in operation, under the command of Passed Assistant Surgeon Stimpson, U. S. M. H. S., until persons ceased to desire to leave Miami, as is believed to have been conducted to the fullest satisfaction and commendation of all who sought its refuge—judging from press articles praiseworthy in tone.

That yellow fever was introduced last year in Key West, Miami and Port Tampa City, from Cuba no thoughtful and impartial reader of the reports above submitted can entertain any doubt. Cuba was the only West Indian island or foreign country possessing yellow fever in endemic form, with which any trade with Southern Florida was had during 1899, and therefore to seek for causes in obscure ways of importation,

as, for instance, through New Orleans by the fruit trade, or through the same city from Mexico, or via New York, is both irrational and illogical. The proposition is indisputable, the disease was imported into Florida from Cuba. The second question to be answered is, how was the disease imported? And, thirdly, and the most important of the contention as relates to the future welfare of the State and exemption from future visitations, the responsibility for the introduction of yellow fever into Florida the past year.

The reports of Drs. Sweeting, Horsey, Jackson and Weedon, acting and reporting independently of each other, all suggest that inefficient disinfection of vessels or careless administration of passenger pratique at Havana and Nuevitas, or both, to have been the source of importation into this State. Whether the trunks with false bottoms, which have been alluded to and elsewhere illustrated, and about which Dr. Browder kindly writes in answer to some queries, were or were not the directly inciting cause of the epidemic at Key West, or whether persons were improperly passed as immune by the United States Marine Hospital Service at Havana who were not immune (as has been established in at least one well authenticated instance, as witness the certificate of Mr. Sanburg, who in September experienced yellow fever in Key West), and thus became the producing *foci* by developing a case of yellow fever after arrival, and not at first recognized, makes no material difference in the circumstantial chain of evidence and as establishing the fact that there was apparently a careless and perfunctory discharge of duty by some Government officials stationed in Havana and other Cuban cities. The presumption is very strong in favor of the trunks with false bottoms which were seized for supposed violation of the customs regulations, being the distributing *fomites* of the epidemic at Key West. These trunks were inspected by the Chief Inspector, an immune, assisted by a special deputy Inspector of Customs, who was a non-immune. Another non-immune, also an employe of the Customs House, and, as far as can be determined, the only other non-immune in the Customs House force, handled the soiled clothes which were in the main body of the trunks and inspected quite minutely some neckties which attracted attention by their pretty appearance. Dr. Browder (the special deputy Inspector above alluded to) was taken sick within the incubative period of the disease after handling the contents of those trunks, and Mr. Eagan, the other non-immune above mentioned, sickened a few days afterwards. None of the immune force were stricken. The infection rapidly spread from Dr.

Browder to the other inmates of his boarding house, and all were sick within the period of a week, with the exception of Mr. Sudlow, the proprietor, who had experienced an attack of yellow fever in Jacksonville in 1888.

Seemingly commencing on Duval street, the infection spread up that street, and then branched to neighboring thoroughfares. Division street, however, which runs at right angles to Duval and some squares distant from where the first cases on Duval street occurred, was not invaded for three weeks after the disease was recognized in the lower portion of the city and near the water front. The week preceding the 23d of August the State Health Officer spent in Key West, and his attention was not directed to any unusual sickness. The day he left Key West for Miami (August 23) he made inquiry of Drs. Sweeting and Fogarty, who were paying a friendly visit, if either of them had seen any case or cases of fever which might in any way be construed as "doubtful." Both replied that they had not, and this is corroborated by their bedside notes of cases which developed within that week and the week following. It has been suggested from a review of the mortuary record of Key West during July and the first portion of August that cases of yellow fever may have occurred prior to the first recognized case (August 26), and which were returned to the city Health Department under a misapprehension of other diseases. Among this number is mentioned the death of Carl Burgos, a boy of 10 years, who died on the 12th of August, of reported cerebro-spinal meningitis. From some doubtful symptoms connected with his death the possibility of yellow fever has been suggested. Dr. Maloney has been communicated with, and the following correspondence gives the information obtained in regard to the case:

KEY WEST, FLA., March 1, 1900.

Dr. J. B. Maloney, City:

DEAR DOCTOR—It has been mentioned to me that a patient of yours who died last fall—a boy by the name of Burgos, whose mother lives on Whitehead street, opposite the County Court House—was possibly a case of yellow fever, from the fact of short illness, yellow discoloration of the skin and black vomiting. Will you kindly give me such information as your notes at the time and memory since may be able to furnish.

Believe me, Doctor, that in seeking this information and other queries which I have heretofore made of you, I am prompted not to annoy you or to take up your time, which is so much employed with the sick, but if I am to give

the people of Florida, a truthful and honest opinion of the commencement of this last year's epidemic, I must sift all rumors and suspicions. If you have positive knowledge of the fact of no other sickness in the Burgos family after the death of the little boy, or the contrary, such information will be of much importance.

Thanking you in advance, I am, Doctor,

Very truly,

(Signed)

JOSEPH Y. PORTER.

State Health Officer.

KEY WEST, FLA., March 5, 1900

Dear Doctor Porter:

Half worked to death and sick enough to be in bed, I shall try to answer yours of the 1st, since I appreciate that you might have anticipated an earlier reply. Carlos Burgos was taken ill August 6th, and died August 12th. I saw him on the 7th. I made a diagnosis of spotted fever, and since then I have had no cause to change my diagnosis. To me the case was typical of cerebro spinal meningitis. I saw no case like his during the epidemic of yellow fever, nor do I ever expect to. You know that I saw a great many cases of yellow fever in the past epidemic; never lost an opportunity to see the most malignant as well as the mild. No case presented symptoms like the Burgos child. The boy had cerebro spinal eruptions, opisthotonos, kernig's sign, intense headache and rapidly passed into delirium of a maniacal or rabid type, and of course died at about usual time of bad case of spotted fever. No one contracted fever from the house in which he died. Cox, a lay minister, and Sturgers, the Baptist preacher, were in constant attendance, the other children of the house were around more or less, and not a single case of yellow fever occurred among those exposed for more than a month after. None of those taken in September had any symptoms that the Burgos child showed.

Yours very sincerely,

(Signed) J. B. MALONEY.

So, also, has it been suggested that Miss Lavinia Weech, a native of the Bahamas, aged 32, dying on the 29th of August, of reported meningitis, may have been an unrecognized case of yellow fever. The correspondence with her medical attendant, who, in this instance, was the City Health Officer—Dr. Plummer—gives information on this point. Again, Mike Cosgrove, a boy of 11 years of age, who died on the 31st of August of typho-malarial fever, was also a patient of the City

Health Officer, has been commented upon as highly "suspicious of yellow fever," is explained by Dr. Plummer in the following correspondence:

KEY WEST, FLA., March 1, 1900.

Dr. J. V. R. Plummer, City Physician, Key West, Fla.:

DEAR DOCTOR: It has been mentioned to me that two cases in which the result was fatal, and which were treated by you last summer, or fall, might possibly have been yellow fever, namely, a young woman by the name of Weech, and the grandson of Capt. Philip Cosgrove, and as I am trying to determine the first case or cases of yellow fever in this city last year, I will be greatly obliged to you for a detailed history of those cases, and also for any additional information which will throw any light on this most interesting subject.

Very truly,

(Signed)

JOSEPH Y. PORTER,

State Health Officer.

KEY WEST, FLA., March 2, 1900.

Dr. Joseph Y. Porter, State Health Officer, Key West, Fla.:

DEAR DOCTOR: In reply to yours of yesterday, making inquiry as to cases of Miss Weech and the grandson of Capt. Philip Cosgrove, which you say have been mentioned to you, might possibly have been cases of yellow fever, and also any additional information which might throw light on determining the first case or cases, I will state, as to Miss Weech, that she was a young woman twenty-two years of age, who suddenly suppressed her menses by taking a cold bath; she had not one characteristic symptom of yellow fever. Her symptoms were in exact accordance with the cause of her disease, which was suppression, as aforesaid.

The suppression caused a determination of blood to several organs, and especially to the brain, which set up a congestion of it and its meninges, which resulted in a meningitis, from which she died, in spite of hot baths, purgatives, emmenagogues and revulsive treatment. At the time of and for several days after the death, there was no thought or suspicion of yellow fever, but subsequent to the announcement of the first case there may have been a rumor among the laity that the case possibly might have been yellow fever; by whom and why this rumor was set afloat, of course I have nothing to do with. I view it as absurd and ridiculous. Of course the laity entertain or spread many rumors about many things.

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As to the case of the grandson of Capt. Philip Cosgrove, I have to say that I was given the following history: That he had been suffering for some time previously with dysentery; that he had been swimming a great deal in the sea, exposed to the hot sun, and that he had eaten a large quantity of tamarinds and hog plums; found him with fever, with a gastro-enteritis, and typhoidal symptoms, hebetude, low muttering, delirium at times. To this train of symptoms was added periodical chills, which made me suspect the conjunction of malaria, and diagnose the case as typho-malarial, which diagnosis was concurred in by J. R. DeArmona, M. D., who was called in consultation with me. There were no characteristic symptoms of yellow fever in this case. It has been mentioned to me that a medical gentleman visited the case after death, pronounced it yellow fever, and ordered an immediate burial. It has also been mentioned to me that this medical gentleman visited a patient of his own for six days, and made the diagnosis only upon the day the patient died, and there was a large and public funeral. This is all I have at present to say about the Cosgrove case.

Now, as to additional information, it has been mentioned to me that there had been several cases of fever antedating the first cases reported and announced as yellow fever, which one of my informants officially mentioned when he was required to report to me the number of cases of yellow fever that he had then on hand, that he and two other medical gentlemen had had similar cases for two months, or six weeks, at least, before the report and announcement of the first case of yellow fever. When I asked him what he and the other gentlemen diagnosed these cases, he said: "Some were diagnosed as typhoid fever and some as dengue."

It has also been mentioned to me that a case in which a fatal result occurred might possibly have been yellow fever, although the attending physician and his consultant pronounced it cerebro-spinal meningitis. I simply mention this *en passant*.

It has also been mentioned to me that there were other cases prior to the one last mentioned.

I shall be pleased at any time to give you any additional information on this most interesting subject.

Very truly,
(Signed) J. W. V. R. PLUMMER,
City Health Officer.

On the night of August 22d the State Health Officer was requested by Dr. J. V. Harris to see with him, in consultation,

his brother, Capt. James Harris. When the house was reached Capt Harris was found in *articulo mortis*, but from the history of a sickness of short duration, and unexpected fatal termination by the members of the family, a distrust of the nature of the sickness was aroused, which led to a close questioning, but failed completely to discover any symptoms which might be considered as those of yellow fever, except as just stated, the short period of illness. The history of the case is here given in Dr. Harris' own language:

KEY WEST, FLA., February 27, 1900.

Dr. J. V. Harris, City:

DEAR DOCTOR—Referring to a conversation respecting the last illness of your brother, Capt. James Harris, will you kindly give me a history of his case, detailing as minutely as you may be able, both from notes and recollection, the salient features of his sickness? Do you think that Capt. Harris could have died from yellow fever, and unrecognized by you, and can you trace any connection between his movements about the city prior to his sickness, and others who were subsequently sick with yellow fever? In this connection any information which you may be able to give me which will throw any light upon the source of infection of last fall, the first cases, and how long existing in the city prior to recognition by the physicians will be very gratefully received and acknowledged.

Yours very truly,

JOSEPH Y. PORTER, M. D.
State Health Officer.

KEY WEST, March 1, 1900.

Dr. J. Y. Porter, State Health Officer:

DEAR DOCTOR: In answer to your communication of February 27th, with regard to the inception and spread of yellow fever in this city during the month of August last, and my knowledge thereof, I beg to make the following statement:

Upon the evening of the 28th of that month I was called upon by Dr. C. B. Sweeting, the quarantine officer of the State Board of Health at this port, to consult with him in regard to the sickness of Dennis Egan, an inspector of the custom house, who had been taken sick with fever upon the 26th of that month, and which, he told me, was a very suspicious case.

We made a thorough examination, and, with the exception of albumen in the urine, finding the usual diagnostic symptoms of yellow fever, we agreed upon a diagnosis to that effect, but decided that it would be best for the interests of all concerned to wait until the next morning and make another test before wiring State Health Officer Porter. The doctor then told me that he had another suspicious case, in the person of William Browder, a special inspector, and said that he would also get a specimen of his water. Early the next morning, upon testing these specimens with heat and nitric acid, we found an abundant deposit of albumen in both, confirming our diagnosis in Eagan's case and Dr. Sweeting's suspicions in that of Browder.

Previous to that time I had no suspicious case in practice, nor had I heard of any from other physicians, neither do I believe that any existed. These gentlemen were both boarding upon Duval street, less than three blocks apart. Cases begun to develop rapidly; one case begat another, and that still another, calling vividly to mind the repopulating of the earth after the deluge. Starting from the boarding house of Browder and Eagan, as foci, the infection began to spread, each case furnishing a new center, its ramifications extending in every direction, crossing and recrossing each other until the network made by its radiations resembled an immense spider-web, only stopping for a while at Division street until its scouts could return and pick up such non-immunes that had been overlooked, and finally leaping that barrier and continuing its course to the waters surrounding our island, only stopping its ravages because its energies were expended, from the simple fact that there was nothing left to feed upon. Within less than three blocks of Browder's boarding house there existed, to my knowledge, over one hundred cases (a list of which is appended), most of whom were personally attended by me, and all directly traceable to that focus. Many of these spent the day in the city within the infected district, sleeping at night in various parts of the city, and thus spreading the pestilence more rapidly. I am satisfied that the estimate of the number of cases, which, of course, could only officially be made from the reports of physicians, was entirely too small. Most Key West people attend their own families when sick with yellow fever, and I believe that if the number of cases had been put at 2,500, it would have been much nearer the mark.

With regard to the report as to the cause of the death of my brother, Capt. James W. Harris, I can only state that it was utterly without foundation. His death was caused by

heart failure, arising from tobacco heart, as was evident from his intermittent pulse, the absence of normal rhythm and other symptoms. We were aware of this when he first came to us, our attention having been called to the fact by himself. The immediate exciting cause of his death was a violent attack of cholera morbus, brought on by imprudence in eating; his stools were never suspicious, and after the purging and vomiting was checked, which was done in a few hours from the inception of the attack, his stools were what I would style healthy "baby stools" up to his death. My brother had a severe attack of yellow fever in Memphis, Tenn., during the year 1878, from which he came near dying.

Now, with regard to the origin of the infection, it has been clearly shown that Browder and Eagan were the first cases known to exist, and, of course, the only question to decide is where they caught it. As soon as the disease made its appearance, I immediately endeavored to trace it, and found that two trunks which were brought in on the steamer Olivette upon the 14th of August, and which it was reported had been disinfected in Havana had been seized by Inspectors Browder and Eagan and examined by them upon the 15th of that month. The body of the trunk was filled with dirty, foul-smelling clothing, with a false bottom containing cigaretes. Browder and Eagan were taken sick shortly after, and all cases arising can be traced directly to them, and, reasoning *a priori*, the only logical conclusion to be arrived at is that they were infected by the germs brought over from Havana in that trunk, and that they transmitted the infection to the people of Key West.

I am, Doctor,

Very truly and fraternally yours,

(Signed.) J. V. HARRIS, M. D.

I append a list of a small portion of the yellow fever cases directly traced to Inspectors Browder and Eagan.—J. V. Harris, M. D.:

Browder, foot of Duval street, August 24th.

Eagan, Duval street, distant three blocks, August 29.

Stockin and Morris, Duval street, one block, August 29.

Florida and Marian Harris, Duval street, one block, August 31.

Eight lodgers same house with Browder.

Twenty-two people, in half block, foot of Duval street, half block distant.

Seven cases Robert's Restaurant, same block.

Four cases U. B. Company, one block.

Rosen, Duval street, directly opposite Eagan, three blocks from Browder, September 1st.

Bain, Fleming street, half block from Eagan, August 30.

Pate, Eaton street, near Duval, September 1st.

Hunter, Whitehead street, one block from Eagan, August 31.

O'Brien, Caroline street, one and a half blocks, September 1st.

Hankins, Duval street, one block, September 1st.

Luson and Martin, Caroline street, about two blocks, about August 30th.

Two Higgs children, Duval street, one block from Eagan, September 1st and 3d.

Anlick & Wolferman, Duval street, one block from Browder, September 2d and 3d.

Four cases Bolio's, Duval street, opposite Browder's, August 31st, September 2d, 3d and 6th.

Henning, Caroline street, one and a half blocks from Browder's, September 7th.

Larkin, Electric Light Company, two blocks, September 9th.

Seven cases, corner Duval and Caroline, block and a half from Browder's, September 9th to 15th.

Boynton, Duval street, half block, September 6th.

Three cases printing office, Green street, September 9th to 13th.

Harris, Duval street, one and a half blocks, September 6th.

Niles, Duval street, same block, September 13th.

Shelly, three cases, September 8th, one block.

Simms, three cases, two and a half blocks, September 16th.

Sewell, Front street, two blocks, September 11th.

Cochran, Front street, two blocks, September 12th.

Flores, Duval street, opposite Browder's, September 13th.

Lewis, foot Thomas street, two blocks, September 13th.

Moss, Hopkins, Sands, Sewal, Duval street, September 22d to 30th, one block.

Four Montsalvatge, Tel alloy, one block, September 13th.

Hagerdorn, Green street, half block, September 13th.

Man at Gwyn's, same block.

Trevor, Duval street, one block, September 14th.

Scott, Weatherford, Ellsmore, Ellsmere, three blocks.

Grillon, three blocks.

Bethel, one block, September 23d.

Bishop, two blocks, October 13th.

When Capt. Harris was seen by the State Health Officer he had just died. There was nothing in the appearance of the

body denoting a death from yellow fever. Every possible inquiry short of a post-mortem examination was made and directed toward ascertaining this fact, but Dr. Harris was so positive in his statements of symptoms and nature of sickness and cause of demise, that it was not thought to be necessary to further question or doubt the diagnosis. Besides, when, later on, and after yellow fever had been recognized and declared as epidemic on the island, in discussing the subject a second time with Dr. Harris, he very positively stated that his brother, Capt. Harris, had experienced an attack of yellow fever in Memphis in 1878, which came very near being fatal from black vomit as a complication in the illness. At the time of death none of these above-mentioned cases, except that of Mike Cosgrove, seemed to have aroused any apprehension of being other than what were returned as the cause of death, and therefore the doubts and suspicions now expressed are purely *post hoc* opinions and discussions suggested by the subsequent development of the disease and the efforts to determine the date of its first appearance.

These cases are mentioned because it is the purpose of the writer to state all facts that have come or have been presented to his attention as in the least bearing upon this question of cause and first appearance. Whether or not they were cases of yellow fever can neither be affirmed nor denied, except in the case of Capt. Harris, for the State Health Officer did not see them. As far as determining the responsibility for yellow fever introduction into Key West this past year, they have no important bearing upon the subject.

Whether Dr. Browder or Mr. Eagan were the first cases of yellow fever, or whether the infection was present on the island for a week or two previous to the 23d of August, is of no essential value in determining the responsibility of introduction. Havana was the only yellow fever infected port with which Key West had any communication, and the quarantine and sanitary surveillance of vessels, baggage and persons from that port to Florida ports was entirely and completely under Federal control, exercised by the Marine Hospital officials at Havana. After the cessation of the Spanish-American war and the assumption by our Government of military control of Cuba, the Marine Hospital Service, under the direction of the President, immediately established the functions of a national quarantine service at all the Cuban ports. The completeness with which this service usurped all authority is apparent from the fact that by the 1st of July, 1899, vessels and baggage destined for Florida ports and which for ten years previous to the Spanish war had been dis-

infected by Florida State officials on arrival at Florida ports, were reported disinfected at Havana and so labeled and practised. Without causing friction with the Federal sanitary powers on a subject on which there was only a general feeling of distrust and no positive evidence of sufficient magnitude upon which to discredit the methods of the said service, it would have been inadmissible and ill judged to have refused to accept the certificates of the Federal officers.

Suspicion and distrust are not adequate for action in such an important matter, where the comfort of persons, interruption of trade, and possible destruction of commerce is concerned, and which would have inevitably followed a re-disinfection of baggage and detention of vessels after arrival at Florida ports. This phase of the situation is referred to in this connection and somewhat discussed because it has since been asked, "Why, if the State statute and the Federal act of 1893 conferred authority to re-disinfect vessels and baggage at Florida ports of arrival, was it not done?" The Board and its Executive Officer did not desire to place themselves in antagonism to the Federal authority without sufficient evidence or amply condemnatory proof of inefficiency of methods as practiced by the Marine Hospital Service in Havana and elsewhere in Cuba. When conversing on this subject with the State port sanitary inspectors at Key West, Tampa and Miami, in early July of last year, on the complaint from them that no baggage for disinfection was received at their stations, it was held that as the Marine Hospital Service had assumed the powers of a national quarantine department between Cuba and Florida, and had completely wrested from the State Board of Health of Florida the functions of sanitary surveillance with Cuba, that it was eminently proper that that Bureau should also assume the responsibility and be credited with results, whether of successful and meritorious work or disastrous consequences. It should not be forgotten that the system of an "all year" communication with Cuba by Florida, and especially with Havana, based upon certain sanitary construction of vessels, immunity of passengers as to yellow fever, and sterilization of baggage prior to admission into the State is a Florida conception, and has been rightly termed the "Florida plan of quarantine." It originated in the Monroe County Board of Health, before the establishment of the State Board of Health, and was successfully operated by that body, and when the State Board of Health was organized by the Legislature of 1889, this plan and system was embraced in its rules and regulations. So, also, when the Federal act of 1893 was passed by Congress, under stress of a cholera scare, granting additional pow-

ers in quarantine matters to the Marine Hospital Service, the regulations of the Florida Board of Health in this particular were made the basis of the Federal maritime sanitary rules and incorporated, almost verbatim, in the first edition of the national quarantine enactments. Thus was the importance of the "Florida system" recognized. It was but fair, therefore, that Florida, having constructed a system, relieving with perfect safety, under certain feasible and practicable conditions, an hitherto existing embargo on commercial intercourse in the summer season—which was proving damaging to the business interests of the South—should be permitted to operate that system and enjoy the benefits and fruits of the labors of the State Board of Health in the effort to build up a vast and rich commercial industry, and populate many of the waste places of the great Southern peninsula. That the purpose of the Board in this direction has hitherto been crowned with success, and with results, too, at no expense to health or life, attention has only to be directed to the astounding growth of Tampa, Key West and Miami. From 1889 to 1899 yellow fever was excluded from Florida, although in the years embraced in that period travel was larger, commerce more active, and all conditions more favorable to the introduction of yellow fever from Cuba than at any time during last year. During the period of ten years referred to all disinfection of vessels and baggage of passengers was performed at the Florida port of arrival and by officials of the State Board of Health. The parallel of a quarantine system and sanitary surveillance of ten years administered undividedly by State officials, with a successful result of disease exemption, speaking particularly of yellow fever, with a year's experience, when the system was usurped and authority wrested by Federal power, is presented for the thoughtful consideration of the Board, the Executive of the State, the people of Florida and of the United States.

In one single year's administration in Cuba, with all the authority and power of the Federal government at its back, the record shows that the Marine Hospital Service, operating a national quarantine in Cuba, is apparently responsible for the introduction of yellow fever into the United States by four different sources. Does this demonstrate superior ability, compared with State management? Can it be wondered, therefore, that the American Medical Association and the American Public Health Association—composed of the highest intelligence and ability found in the medical profession in the United States—petition Congress to relieve the present undignified attitude of legislation towards the public health of the country, and to institute a Department of the

Public Health, separate and in no ways connected with a bureau whose official appellation plainly indicates what Congress originally intended its functions should be. Is it not the health and life of the human race of sufficient importance to be ennobled by the establishment of an independent department, conducted by men in civil life—men well versed by knowledge and experience in these special subjects? Why should such an important matter as health legislation for the entire country, be "tacked on" to a semi-military bureau of the financial department of the general government? Nor does there seem to be any good reason why, in a republican form of government, democratic in profession, the nation's health—a matter of vital importance to the individual citizen, affecting so intimately his life and the life of his family—should be administered by a military power; certainly the civil function of the government is better qualified by acquaintance with the people and their environment to deal with these questions. For these reasons the State Health Officer advocates and urges the Board's endorsement of the Spooner and Ray bills, now before Congress.

No argument is needed to convince the most biased as to the proper course to be pursued hereafter, if the State is to be assured of immunity from yellow fever in the future, as it was in the years prior to 1899, nor where the responsibility lies for the introduction of yellow fever into the United States during this past year.

The history of the late epidemic of yellow fever at Key West would not be complete without reference to an event which, sad and pathetic in its ending, contains much of the nobility and martyr-like character of the medical profession, that calls for encomiums not only of those of his own faith, but an admiration from the whole world, and demands more than a passing notice, as is usually given in purely official documents.

The commencement of the yellow fever at Key West found Assistant Surgeon William McAdam, of the United States Marine Hospital service, in charge of the Marine Hospital, and a few days later Assistant Surgeon L. D. Fricks, of the same service, was assigned to duty at Key West for governmental work in connection with the occurrence of the fever.

These young officers were medical gentlemen, unostentatious, eager to learn, never losing an opportunity to gain information, ever ready to assist, and never tiring in duty. Careless in the matter of personal safety to a degree as to oftentimes evoke rebuke from the writer, the matter of self was never thought of, and it seemed to be the one absorbing de-

sire to embrace every opportunity to learn, that in the future their individuality by experience might be of benefit to the profession and corps in which they had cast their lot.

That they both faithfully performed every duty, discharged every trust and responded cheerfully to every call made upon them, medically, officially or otherwise, it is a pleasure to testify to and to emphasize.

These young men were observers, patient seekers after the truth, never intrusive with opinions, nor offensively conscious of their official position or investitures, but modest withal, and grateful of interest taken in their behalf; deferential to elders, in the profession civil, as well as the profession official, they won for themselves the esteem and admiration of the citizens of Key West, and when, in the expiring gasp of epidemic, it was learned that Dr. McAdam was stricken, fervent prayers went to the God of Battles that his young life would be spared.

Friendly attention, skilled nursing, and medical aid, however, did not avail, and on Thursday the 12th day of October, the sword was broken, the armor crushed, and death was conqueror.

Loving and tender hands laid him away in mounds of flowers, sweet emblems and symbols of the immortality of the soul, as the tropic sun was sinking in the west, and as twilight was hushed by the muffled notes of the bugle in the last "taps," calling a gallant soldier to his long rest.

Dr. McAdam was a martyr to duty. He was brave and fearless, and he fell at his post. A moral courage which confronts disease and looks death squarely in the face defyingly where and when duty calls, is more deserving of monument, epitaph and song, than he who in the excitement of battle, and inspired by the shouts of comrades, faces a cannon's mouth. In one instance the enemy is seen, the danger can be measured, the chances taken, and there is hope in the multitude. But in the other the destroyer is hidden, the attack is insidious, the victim is defenseless to protect, deprived of armor or weapons, and he fights alone. There is no cover to seek or friendly rock to fight from behind. Dr. McAdam was considerate and kind to those about him; gentle as a girl, yet with the fortitude of a lion. His was a battle for humanity, and as Nature's acts are all compensatory, if he lost in the strife here, he must win in the hereafter. Therefore he has his reward, and, like Jim Bludsoe, the engineer of the Prairie Belle:

"He saw his duty a dead sure thing,
And went for it thar and then,
And Christ ain't going to be too hard
On a man who died for men."

Yellow fever was introduced into Miami by the cattle steamer "Laura," a wooden vessel from Nuevitas, Cuba. Dr. Jackson's testimony on this point is very clear and positive, as is also that of Dr. Horsey. It is true that Anderson, a refugee from Key West, at the commencement of the epidemic at that place, and before quarantine measures were instituted at Miami, developed yellow fever eighteen hours after his arrival at Miami, but his case was recognized as suspicious immediately upon his sickening, and before he could infect anybody or anything that might act as *fomites*, he and his whole family were moved down the bay, five miles from town, to a vessel which was used as a hospital and detention camp for this particular purpose. After his recovery, and before being allowed back in Miami, himself, family and clothing were thoroughly disinfected. There was no spread from his case, as is conclusively proven by the subsequent history of the epidemic, which developed some six weeks later. Hargrove and two others simultaneously seized and from the same *focus* of infection, were the first cases of the Miami epidemic. They contracted their seizure from visiting the cattle steamer "Laura." An analysis of Dr. Jackson's report on the Miami epidemic shows that the "Laura" arrived at Miami on the 10th of September, having a clean bill of health, signed by Dr. T. F. Richardson, an Assistant Surgeon of the Marine Hospital Service, who was in charge of the quarantine operation at Nuevitas. The vessel had also a certificate of having been disinfected according to the United States Treasury (Marine Hospital) regulations. A fac simile of both bill of health and certificate of disinfection appear elsewhere in this report. The vessel was reported (on arrival at Miami) to have been mechanically clean, and upon inspection was detained in quarantine only to complete the full five days from date of her disinfection at Nuevitas. The bill of health and certificate from the Federal official at Nuevitas being accepted. It is learned that Hargrove visited this vessel quite frequently, and several persons declare that he mentioned to them prior to his sickness (see Dr. Horsey's report) that he was on board the steamer at night. Hargrove was sick some twenty-four hours before being seen by a physician or receiving medical attention. Dr. Jackson was then called, and being in doubt as to the nature of his sickness, wired for Dr. Horsey, the Assistant State Health Officer.

Hargrove died on the 26th of September, but before his death every one known to have been in the Hotel Miami, or to have had any communication with him, were removed to a floating detention camp five miles down the bay, and there kept under observation for ten days. As in the case of Anderson, a thorough disinfection and sterilization of effects of each person was performed prior to their release. In the meantime, Dr. Horsey states that with the means at his command, he disinfected the Hotel Miami, using a bichloride of mercury wash, sulphur dioxide fumes and formaldehyde gas, first pasting all openings and making the building as air-tight as possible. About this time there was an extensive washout on the Florida East Coast Railway, interrupting travel and traffic for a week or more. A large quantity of brimstone ordered for the purpose of redisinfection of the Hotel Miami was thus delayed in arrival. This fact is mentioned because it is now thought that if the second disinfection of the Hotel Miami had been made, it is probable that other cases would not have occurred in that building. About the time of the Hargrove case, two other persons developed fever, one, a man by the name of Whitnall, who assisted in coaling the steamer, and a boy named Haas, who loafed in the steamer when she was in port. These individuals were sick, but had no medical attendant. The circumstantial evidence, however, that they experienced mild cases of yellow fever, is very positive. On October 16th, a Mr. Flye died from suppression of urine, and the circumstances connected with his death were sufficiently suspicious to cause a post mortem to be made at night. The evidence of Drs. Horsey and Jackson, together with the post-mortem notes, is not very clear as to the cause of death, although the Marine Hospital Surgeons expressed a firm belief of yellow fever at the time. A daily house-to-house inspection had been kept up, after the death of Hargrove, for fifteen days, and it was a strange coincidence that Flye should have sickened the very day that the inspection was discontinued. Mr. Flye's medical attendant did not report him sick until he was in an unconscious state, and almost in *articulo mortis*. Conceding that Flye died from yellow fever, his case would be the second death and the fourth case.

Philip DeHoff, the next case recognized in its incipiency, was a clerk in the Hotel Miami, and developed yellow fever within five days from his return to the hotel from the detention camp. Other inmates of the hotel were subsequently sick, but it is not quite certain whether they contracted the fever from the infected building or from DeHoff. From the Hotel Miami, the disease spread across the street to a board-

ing house occupied and operated by a female family of the name of Knapp.

The epidemic at Miami was not generally virulent in character. There were some malignant cases, which ended fatally, and again there were severe cases which recovered, and on the whole it may be said that the disease was of a mild type and extent in numbers and rapidity of spread being small. Miami is a new town, spread over quite an area, with scattered dwellings and wide air spaces between buildings. It is also a remarkably clean town, being sewered in much of the inhabited territory and well drained. The sanitary conditions, therefore, were all adverse to an extensive or widespread distribution of the disease. It can be confidently asserted that Miami was closely and carefully watched in all sanitary conditions of health and health police, during the entire summer, and certainly from the period of the first report of dengue; for it was felt that, as in the case of Key West during the previous summer (1893), there would be no one who would dispute the existence of dengue, and if, perchance, yellow fever should be afterwards introduced, the assertion would be made that yellow fever had existed unrecognized in Miami for several months. For that reason, and as has been stated in another portion of this report, the State Health Officer cautioned Dr. Jackson, the local representative of the Board at Miami, to keep careful bedside charts and notes of all cases of dengue, that the proof might not be wanting, if called upon to confirm a diagnosis made not only by himself, but also substantiated by the Assistant State Health Officer and finally by the State Health Officer. To fair and impartial thinkers and reasoners, it must also be convincing evidence that dengue did prevail in Miami from early July until October, because of subsequent attacks of yellow fever of those who early in the season experienced a seizure of dengue, and whose clinical charts are presented by Dr. Jackson, side by side in his report; and because, also, of the large number of cases of dengue treated by Dr. Jackson—which he carefully computes at about 300—there was not a single death. It is no argument for the skeptics and prejudiced to say that Dr. Jackson did not recognize yellow fever at first, for in the Anderson case, the Key West refugee, he at once saw that the fever was different in character from that which he had been hitherto treating, and immediately took measures to isolate and guard the patient from outside contact. From the time of occurrence of the Anderson case the sanitary watch over the town was doubled by a house-to-house inspection, which was kept up for two weeks, and by a

careful personal investigation of all cases of sickness, made either by Dr. Jackson, Dr. Horsey or Dr. Stimpson of the United States Marine Hospital Service. Again, on the occurrence of the Hargrove case, the sanitary supervision of Miami was increased in point of vigilance. A fact worthy of mention for thoughtful consideration, and most potent in argument of the non-existence of yellow fever at Miami until October of the past year, is that there was no spread of the disease from Miami or occurrence of cases at any time at Buena Vista, Lemon City or Coconut Grove, which are within a few miles and in easy walking distance of Miami. This would most certainly have occurred if yellow fever had existed at Miami for any length of time unrecognized, and with hourly unrestricted communication with those places. The conditions at Key West of the previous year being well in remembrance, the warning to Sanitary Agent Jackson, at Miami, when he first discovered dengue in his jurisdiction, was both timely and of subsequent value. Dengue at Miami was confirmed by three observers, each acting independently, and each interested in arriving at a truthful decision, as bearing importantly on the welfare of the place and of neighboring places on the East Coast Railway. It is to be regretted that the two young officers of the Marine Hospital Service who were ordered to Miami during the past summer as observers of events, from their own acknowledgement, had no practical or actual experience in dengue, and of but limited and mostly theoretical acquaintance with yellow fever, and therefore fell into the error of declaring all fevers seen by them as yellow fever. Much unpleasant friction arose from this unfortunate assignment which could have been averted had men of extended experience in both diseases been selected for such an important duty. It is reported that every courtesy, professional attention and facility for acquiring information at Miami was accorded Past Assistant Surgeon Stimpson and Assistant Surgeon Van Esdorf, of the Marine Hospital Service. It is stated that Dr. Jackson placed his private office at their disposal, and every effort was made to furnish and assist them in collecting data. Unfortunately a degree of irritation arose from certain methods pursued by the Government officers in conducting investigations not at all seemingly necessary to effect the purpose of intelligent examination. It is cha itably believed, however, that excessive zeal and determination to prove as yellow fever cases which were undoubtedly dengue, as subsequent events demonstrated, led these young men into unprofessional indiscretion complained of by Dr. Jackson. After yellow fever was introduced and

the epidemic character was easily distinguished from that of dengue, which had in early summer prevailed, Dr. Stimpson and Van Esdorf rendered efficient service at the McAdams Detention Camp, which the Marine Hospital Service established twelve miles from Miami at the request of the State Health authorities, for refugees from Miami. Only words of commendation have been heard of the very excellent management of this camp by those who availed themselves of its privileges, and it is a pleasure to testify to the satisfaction and service rendered. Whether wearing the livery of the Government or attired in the simple garb of a private citizen, every medical man owes his professional brother a certain consideration, especially when entering another's territory. Nevertheless, it seems to be a "fad" in Federal medical circles to cultivate amaryllie vision when examining into the fevers of the South. As in Key West in 1898, so in Miami this past fall, these officers of the Marine Hospital Service who were sent to Miami, gave the impression of not only being novices in the diagnosis of yellow fever and dengue, but of not seeking exactly after the true state of affairs, and as being directed especially to find yellow fever, and yellow fever only. The State Health Officer asks only for a fair and unprejudiced analysis of the facts as they existed at Key West, Miami and elsewhere in the State this year. The Board is especially interested in arriving at the truth, and seeks neither to evade responsibility nor to place it where not deserved.

It is to be regretted that the Supervising Surgeon-General of the United States Marine Hospital Service, in his report to the Secretary of the Treasury this year, was unhappy in his choice of terms when speaking of the yellow fever situation in Florida. The language of his report, quoted below, can only be construed as designedly reflecting upon the integrity of the medical men of the South, and of Florida during the past summer and fall:

"The Surgeon-General reports that prior to the announcement of the fever, there had been a number of cases of so-called dengue fever, many of which were, without doubt, mild cases of yellow fever. He deprecates the unwillingness of physicians to acknowledge the serious nature of supposed cases of dengue fever, and in his report urges that measures be taken to prevent the spread of dengue, since that disease is so often associated with yellow fever."

"An unwillingness to recognize suspicious cases of dengue" can have no other meaning than a deliberate intention to deceive and conceal. Most certainly it is to be hoped that Dr. Wyman did not purposely intend to insult the medical pro-

fession of this State, and the sanitary officials likewise, whose knowledge of the two diseases of dengue and yellow fever has been well demonstrated in previous years, but nowhere has it been noticed that he has corrected such an impression. Dr. Wyman should have remembered that all of the confusion and contention which ensued at Key West in 1898, in confounding dengue with yellow fever, was caused by Past Assistant Surgeon Guiteras, of his service, obstinately refusing to accept undoubted proofs of dengue, and contending that the prevailing disease was yellow fever. Subsequently Dr. Wyman stated to the State Health Officer at Port Tampa, that he was perfectly satisfied that dengue alone prevailed at Key West in the summer of 1898, and in the Public Health Reports made correction of an item which stated to the contrary, and which had been made public a few weeks before. Therefore, it would seem that Dr. Wyman should have been more careful this year, bearing in mind the mistakes of his Service's officers last year, when alluding to this subject in his annual report to the Secretary of the Treasury, than to attempt to discredit the diagnosis of the local practitioners of medicine at Miami, as well as to refrain from reflecting upon the integrity of the State Health Officer and his assistants.

When the matter is argued in all of its different aspects, with facts, and not *post hoc* surmises and conjectures to base deductions upon, it is thought that there can be but one decision arrived at:

First, That yellow fever was introduced into Florida this past year from Cuba, where all maritime sanitary control for ports in the United States is directed by the Marine Hospital Service, and that the State Board of Health of Florida is in no wise responsible for its introduction. Secondly, That at Key West, the infection was introduced by baggage or persons, practised at Havana; and possibly by both, and that at Miami, Hargrove and two others, a man engaged in coaling the steamer Laura, and a boy who loafed about her, were the first seizures. Hargrove infected the Hotel Miami, and the other two individuals infected the neighborhood in the section in which they lived, between Avenue D and the Boulevard, above 11th street, thus accounting for the existence of two separate and distinctly infected areas, and explaining what at first was confusing in the endeavor to trace the spread of the disease in connection with the commencement of the epidemic. Neither the man engaged in coaling the Laura, nor the boy referred to, had medical attention, and both seem to have been mild cases of yellow fever. At Port Tampa Docks and Port Tampa City,

Dr. Weedon, on whose report complete dependence must be had for a narration of events occurring there, appears quite positive that yellow fever was introduced by barges used for cattle exportation, which he thinks were imperfectly disinfected at Havana, before coming to Port Tampa. These barges were passed at the Tampa Bay Quarantine Station, on the certification of the officer of the Marine Hospital Service in Havana, guaranteeing their freedom from yellow fever infection.

It is true that no history of yellow fever occurring on the "Laura" can be ascertained, nor was there any reported yellow fever at Nuevitas during the past summer (except the case of Dr. Richardson himself, the officer who inspected and disinfected the Laura), but it is thought in the first instance, that the crew of the "Laura" were immune to yellow fever, and although yellow fever was not reported at Nuevitas, it was nevertheless reported from Puerto Principe, of which Nuevitas is the seaport. It may be claimed to be something more than a mere coincidence that Assistant Surgeon Richardson, of the Marine Hospital Service at Nuevitas, should have had yellow fever within a week from the date of his having disinfected the "Laura", and likewise Hargrove and two others should have developed the same disease in a corresponding space of time, from having visited the same vessel at Miami, when coming, as she did, directly from Nuevitas.

Discussion of a subject as important as the above will be profitless, unless practical conclusions, to be of value in the future, can be satisfactorily deduced therefrom. A serious proposition confronts the Board at this meeting and demands most thoughtful deliberation, for under the present conditions of government control in maritime sanitary affairs, and disposition of vessels and baggage of passengers, and passengers themselves, leaving Havana during the summer season, the State Board of Health of Florida is powerless to do more than to protest against being deprived of the management of a system which was devised, placed in operation and successfully carried on for ten years, under its direct supervision. Until Congress shall enact a National Health Department, and separate the conduction of health and sanitary matters of this country from the tinkering of a bureau which was designed and originally organized to care for sick seamen, the States can hope for no permanent relief or future expectation of beneficial results in the health problem, and especially in the prevention of introduction of contagious disease from foreign shores. A fair trial of the Marine Hospital Service, and of a national quarantine oper-

ated by this service has been made during the past year, and the results have been most unsatisfactory. No more arbitrary or clannish bureau-operated national quarantine board could have been instituted than was conducted the latter part of the fall months in Havana under the protection of the Marine Hospital Service. Travelers on more than one occasion were made aware of the "insolence of office", and repeatedly during the past year complaints have been entered at the office of the Board, of insulting remarks and treatment of individuals seeking information or assistance, in leaving Havana, under the impression that was within the province of the State Board of Health of Florida to remedy these abuses. An affidavit presented elsewhere from a prominent cigar manufacturer of Key West and New York, a gentleman of known financial and social standing, plainly sets forth the malice and venom displayed by some of the Marine Hospital Service employes. A noteworthy instance of arrogant authority in the office of the Marine Hospital Services in Havana was exhibited towards another gentleman well known in Havana and Key West, being a resident and citizen of the latter city. This party applied for a certificate to leave Havana for Key West by one of the Plant Line steamers, presenting as evidence of his immunity to yellow fever, an immune card issued by Florida Board of Health. Although he was well known and identified by reputable citizens of Havana, and moreover was registered as an immune in the Marine Hospital Records in Havana, yet his card was taken from him mutilated by being thrust over a memorandum file, and he was then told that he must present a notary's certificate that he was the individual he represented himself to be. It is reported to be an "open secret" in Havana this past year that certificates of immunity to yellow fever were marketable in that city, but so carefully was this practice guarded that it was never possible to fix the act on any one individual. That this report of bartering immune certificates is no idle rumor or surmise, gains credence from the fact that the President of the Florida State Board of Health was approached last summer in Tampa by a prominent cigar manufacturer asking if he could not make "some arrangements" with the State Board of Health by which he could obtain immune certificates in bulk for those of his workmen then in Havana by reason of a late strike at Tampa, and who wished to return. He stated that he could purchase these certificates in Havana for ten dollars apiece, but thought that perhaps he might make a better bargain (?) with the the State

Board of Health here. The President of the Board, seeing that no offense was intended, and knowing the Spanish traditions in respect to purchase of favors, and even officials, did not resent an affront which, from an American would rightly have been considered an insult, but immediately transmitted the information to the executive officer of the Board, to put him on his guard against the reported "business methods" of the Havana branch of the Marine Hospital Service. Again, from a letter from the medical officer of the Tampa Bay Quarantine Station, (given on another page), it will be seen that early in the season he was apprehensive of the character of persons passed upon by the Marine Hospital Service in Havana, as being immune to yellow fever. These fears were also communicated to the executive officer of the Board, and by him made known to the Supervising Surgeon General of the Marine Hospital Service at Washington. The *fac simile* of the certificate of immunity given to Mr. Sanburg at Havana, in early summer, when the gentleman had never resided before that year in Cuba, nor been exposed to the influence of epidemics of yellow fever, is another very striking evidence of careless administration. Mr. Sanburg experienced yellow fever in September of the last year, distinctly emphasizing a non-exposure before.

If the existing conditions are to continue—national interference with quarantine administration by the States—to avoid a divided responsibility between the State of Florida and the Marine Hospital Service, thereby giving that bureau the opportunity to shift liability for its own short-comings, it would seem best that the State of Florida entirely abandon all effort to prevent the introduction of yellow fever into the State, until Congress shall, by proper enactments, settle the question by the establishment of a separate and well arranged National Health Department.

Under the present conditions, the Marine Hospital Service—a branch of the Treasury Department—has the arbitrary power to prevent the "entering" of vessels in the United States until they comply with its dogmatic mandates, however unreasonable or unnecessary. This is the club which is constantly being held over commerce to coerce shipping and ship-owners into compliance with its orders. Without provoking damage to the commercial interests of the State, the State Board of Health would refrain from entering into a contention with the Federal Government on this point. A re-disinfection of vessels and baggage of passengers at Florida ports, when coming from Cuba, means loss of time and great discomfort to the traveling public, a state of affairs which, if insisted upon,

will soon destroy trade, especially in the summer season. Yet the executive officer of the Board is not willing—with the experience of the past year vividly in mind—to enter upon another Summer's campaign against yellow fever exclusion under the existing conditions. He feels that it is not fair to the taxpayers of the State that a demand should be made upon the financial resources of the State to remedy or relieve disastrous situations which the Board has no voice in preventing; for epidemics, however economically managed are expensive.

The alternative propositions are therefore submitted to the Governor and people of this State, through the State Board of Health, whether, as the authority of the Board in quarantine matters with Cuba at present suspended, if not altogether nullified by the United States Treasury Department quarantine regulations, in matters of disinfection and surveillance over Cuban travel, it would not be better to permit the Marine Hospital Service to enjoy the full responsibility for any possible future introduction of contagious disease into this State through maritime sources, by conducting the quarantine stations now operated by the State; or, on the other hand, to hereafter altogether and totally ignore and discredit the said service in its maritime quarantine operations, and re-disinfect such *fomites* when arriving at Florida ports as have already been treated by them.

The State Health Officers expresses to Surgeon H. R. Carter, of the Marine Hospital Service, his thanks for assuming, on the part of the government, the expense of maintaining a sanitary water cordon around Key West, establishing a detention camp at Dry Tortugas for refugees from Key West desiring to leave that island, and for other acts of courtesy and attention to the people of Key West. To Surgeon R. D. Murray, of the same service, who was subsequently ordered to Key West, the State Health Officer extends his grateful acknowledgements for many professional and friendly courtesies both of an official and personal nature.

IMMUNITY TO DISEASE.

Immunity to disease is that condition of the human organism which opposes invasion of sickness, and may be natural or acquired. Some persons exhibit a successful resistance to all disorders which are classed under the "catching order," and can mingle in and nurse those sick with contagious or infectious maladies without harm to themselves. These persons are popularly known as natural "immunes," but, unfortunately, the number is small. Acquired immunity comes either from

an attack of a contagious or infectious disease, or by the use of agents which are known from experience to bestow a protection from subsequent seizures. The doctrine of Phagocytosis explains much of what has been heretofore little understood, and mystification of the germ theory of the cause of disease and why persons equally exposed show different resisting powers. For example, in vaccination, Jenner, over a hundred years ago, discovered a protection against smallpox—quite recently in the different antitoxines and preventives and cures for diphtheria, bubonic plague and other malignant diseases. It is hoped that the present century may not close before a similar protection against yellow fever shall be offered mankind. Second seizures of contagious diseases are recorded, and there ore the possibility of the occurrence cannot be disputed; yet instances of this nature are so remarkably few, that for the purpose of argument or safety to individuals or communities, need not be considered in computing the risk to life or commerce, by allowing such persons pratique in travel during the prevalence of an epidemic. The question of immunity is an important one in connection with the subject of quarantine, and has, from the very organization of the State Board of Health, been made a prominent feature of its regulations in considering communication with foreign countries where smallpox and yellow fever endemically prevail.

It may be said that confidence in these tenets and faith in this protecting quality against disease, especially of yellow fever and smallpox, has been the substructure upon which the State Board of Health of Florida constructed its regulations and on it has built wonderful and safe development of the southern portion of the peninsula.

Without an all-the-year round communication with Cuba, the cities of Key West, Tampa and Miami would not be the prosperous towns that they are today, for their commercial life depends upon transforming commodities, the product of Cuban soil, into marketable shapes, which will favorably compete with the foreign manufacture, or by offering more rapid facilities of transportation of freight and persons from that island. This artery of American commerce could not be kept pulsating except under the nature of sanitary supervisions, and the State Board of Health of Florida was the first sanitary organization of this country to insist upon the question of immunity to contagious and infectious diseases of the tropics being made a determining factor for travel during epidemics, or from countries annually visited by such scourges. Previous to 1889, as far as it is known, those having experi-

enced yellow fever were subjected to detention and quarantine when from infected places, equally with non-immunes to the disease, so that a previous seizure was not regarded, and carried with it no consideration or privileges. Early in the organization of the Board it was sought to make this feature of the Board's work very prominent before the people, by requesting those who could determine a previous attack of yellow fever or smallpox, or a successful recent vaccination, to apply for a certificate of immunity under the seal of the State Board of Health; but prior to the United States-Spanish war there was no general demand for these cards, and many who were known to have experienced these diseases and to come within the provisions thereof, had to be coaxed into making application. Since, however, the United States has had control of Cuba, and capital and individuals are largely invited thereto from this country, there has been an increasing demand for "immune cards." Applications based upon flimsy evidence, and in some instances by only the sworn statement of the applicant himself, or an interested friend or relative, have been presented, and a demand made that the Board *shall* grant the certificate. It is needless to say that all such requests have been refused. Yet, there is another class of cases equally as dangerous to the individual in the future, and to communities as well, in which physicians, without needful experience, although perfectly honest in their belief, make diagnoses of these diseases, and certify to a seizure, when such is not the case. This occurred in Key West in 1898, during an epidemic of dengue, and has occurred at other times in the history of the Board, or prior to its organization. An error of this nature is not likely to prove disastrous as long as the individual is not exposed to the contagious or infectious properties, of either disease under discussion; but, like the fakir gold brick, it holds its value to the deluded purchaser until there is a demand to realize upon its supposed value, when it is found to be worthless; so the immunity certificate received under a false impression of its value may cause an epidemic in a community or a repose for the holder in a cemetery, should an attempt be made to realize upon its supposed protective guarantee.

To avoid fatal errors of this kind, and also to avoid giving offense to those of the medical profession who, as previously remarked, may be honest in their opinions, but at the same time honestly mistaken, it has been determined to restrict the issuing of immune cards from the State Board of Health in the future to only those persons whom the State Health Officer has had visual knowledge of having experienced an attack

of yellow fever or smallpox, or has been recently successfully vaccinated, as shown by a well-pronounced scar. In a period embraced in ten years, no one to whom an immune card, speaking now more especially as to yellow fever, has been issued by the State Health Officer, has contracted yellow fever, although many such have oftentimes been exposed. The following circular, issued quite lately, explains the reasons for restricting the issuing of yellow fever immune cards, the provisions of which will be strictly adhered to:

JACKSONVILLE, FLA., Jan. 24, 1900.

Hereafter, immunity to yellow fever will not be certified to by the undersigned, *unless* he has had visual observation of the case or has been in personal control of the epidemic in which the alleged case is claimed to have occurred, and was then reported and duly recorded. On account of the altered commercial conditions with the Island of Cuba, the demand for immunity (yellow fever cards) has become so frequent and pressing, and from quarters where it is not possible for the State Health Officer to obtain the needful and necessary information to corroborate the evidence submitted, he has decided, in order to avoid giving offense to any of his professional brethren (who, however honest they may be in their opinion, may possibly be mistaken in diagnosis), to limit the issuing of yellow fever immunity cards by himself, to those persons only who come within the provisions above stated.

JOSEPH Y. PORTER, M. D.,
State Health Officer.

A question likely to arise in this connection will be, how is shipping, purposing to trade with Cuba in summer, to be provided with immune crew, and especially of those steamship companies which are in constant communication with ports in Cuba throughout the year? While the regulations of the Board in respect to communications with Cuban ports during the summer season forbids any crew or portion thereof of vessels engaging in this trade, and with Florida ports, who are not immune as to yellow fever, it must be recollected that when that regulation was passed, now over eleven years ago, it was permitted for those immune persons of the crew to go ashore in Havana or other Cuban ports, while the vessel remained in the harbors thereof, and to thus enjoy *all* the privileges and benefits which an immunity, by previous attack, to yellow fever, conferred. Conditions change in eleven years and the steamship companies themselves have enacted a meas-

ure which to a certain degree makes the immunity restriction of the Board in respect to the *entire* crew unnecessary as a sanitary precaution against the introduction of yellow fever into Florida from Havana or other infected ports in Cuba. During the active quarantine season the Plant and East Coast Steamship companies enter their vessels at Havana after sunrise, and depart therefrom on the same day before sunset. This has always been a regulation of the Board—vessels in regular trade not to remain during the summer season over night in the harbor of Havana—but, to this the companies themselves have added a regulation forbidding any member of the crew, under penalty of instant dismissal, to go ashore in Havana during the summer quarantine season. If this restriction is adhered to, there can be no good reason, certainly no sanitary one, advanced in a protective sense against non-immune deck and fire departments. The steward's department, of himself, stewardess and waiters, should be immune as to yellow fever, and their immunity carefully inquired into and proven beyond any doubt, for the reason that these persons come in contact, in a more or less degree, with passengers in waiting on or caring for their rooms, handling garments and bed linen, and there is a possibility, remote, it is true, of receiving yellow fever or smallpox poison through the *media* mentioned. It will be as well that, as far as possible, the transportation companies shall employ for the deck and fire departments of their steamers operating in the summer season between Cuba and Florida ports, persons who have resided for a number of years within the tropics, who are better inured to the climate, less likely to suffer from climatic disorders, and who would be, so to speak, of low susceptibility to yellow fever. There is no doubt but that it will only be necessary to intimate to the companies that such is the wish of the State Board of Health to have the requirement promptly complied with.

A slight digression from the subject is here asked for, that comment may be made upon the foregoing fact of immunity in the Key West epidemic by those previously attacked elsewhere and in other epidemics. It was frequently remarked that the attending physician could with almost unerring certainty determine upon his first visit to a family what members would or would not be attacked, particularly so in children, by ascertaining ages, and whether in Key West during any previous epidemics. Children who were born prior to 1887, and who were in Key West during that summer, invariably escaped in 1899, for the epidemic of yellow fever in 1887 was as far-reaching in

its spread over the island as it was this year. It was not often that the medical man erred in his prognosis of the possibility of seizure.

COMMENDATION.

This narrative of health events for the year would not be complete without allusions to expressions of confidence in the Board and its officials from the press of the State, and also from individual citizens. It is gratifying to know that efforts made in behalf of the people are appreciated, and the State Health Officer, speaking for himself, desires to thank all those who have given him assistance by encouraging word, and by an example calculated to inspire confidence in his work by others. Especially is the following letter from the Governor of the State greatly valued, as bearing testimony of the high esteem, faith in and trust entertained by the Executive of the State in the vigilance of the Board, on behalf of the people, and its integrity and ability:

TALLAHASSEE, FLA., December 26, 1899.

Dr. Joseph Y. Porter, State Health Officer, Miami:

MY DEAR SIR—Your favor of the 22d instant just to hand. In order that no time might be lost, I wired you at once as follows:

"Your letter of 22d just to hand. You can have what funds you need from the State, and there is no necessity of borrowing from any bank."

I also wired President Henderson as follows:

"Your letter of 19th instant to Dr. Porter, just received at this office. The State will advance Dr. Porter what money he needs. No necessity for borrowing from banks."

You are correct in your statement that I assured you that such amounts as were necessary to accomplish the purpose of the Board would be forthcoming. I have the greatest confidence in your management of the financial matters, as well as the health matters in your department, and will take pleasure in advancing you what you may find necessary for the protection of the health interests of our State.

In this connection, I desire to express to you my highest and warmest appreciation of your great and successful labors during this summer. You are an honor to your profession and to our State; and, as one of its citizens, I take pleasure in commending in the highest terms your management of the epidemic this summer.

I trust that your health is good, and that you may live long an honor and credit to our State.

With kind assurances and best wishes, I remain,

Very truly yours,
(Signed) W. D. BLOXHAM.

When yellow fever was announced at Key West and Port Tampa City there was a disposition at first on the part of some of the smaller municipalities to become hysterically panicky, and to especially exert themselves towards, it was said, their own protection, by proposing to institute local quarantines. It was therefore thought necessary to remind the people of the State of the legal enactments respecting the institution of quarantines, and the following circular letter was sent to all the newspapers of the State:

JACKSONVILLE, FLA., September 14, 1899.

To the Editor:

Please state through your columns, that no city, town or place on the mainland of Florida (except Port Tampa and Port Tampa City) is under quarantine surveillance, and that no person, persons, or municipal or other corporation in Florida has any right to maintain "quarantine" or to demand "health certificates." No "quarantine inspectors" on trains are authorized, except in Escambia county, at the Alabama-Florida line (as a precaution against the introduction of yellow fever from the States west), and in Hillsborough county, between Tampa and Port Tampa. These inspectors are officers of the State Board of Health; no others are authorized. The maintenance or operation of anything of such a character, without the authority of the State Board of Health, is a violation of a State statute, and will be dealt with accordingly.

JOSEPH Y. PORTER, M. D.,
State Health Officer of Florida.

Unfortunately, the fact that the executive officer of the Board was in constant touch with every section of the State, by means of the telegraph, was lost sight of. Because each municipality was not hourly apprised of the exact status of the health conditions prevailing, did not argue that sufficient protective measures were not being instituted to prevent spread of disease from the invaded localities. It has always been the policy of the State Health Officer to perform the health work of the State with as little publicity as would accomplish desired results, and where information would only

be of a sensational character and in no wise calculated to advise or counsel, it was withheld, as newspaper gossip of such a character must be deprecated, and should be avoided.

LEGISLATION.

This report would be incomplete without mention of the health statutes passed by the last Legislature. The several laws, some of which were suggested and recommended by the Board in the last annual report, as well as those emanating from other sources, are here given. It is thought unnecessary to dwell upon them, as those endorsed by the Board were fully discussed in a previous report, and the reasons for, and the intention of, the others is quite obvious. The State Health Officer, at the request of the Public Health Committee of the House, visited the Capital during the session of the Legislature and remained at Tallahassee as long as the committee had need of or desired his presence.

CHAPTER 4693. (No 32.)

AN ACT to Provide for the Annual Levy and Collection of a Tax for the Maintenance and Support of the State Board of Health,

Be it enacted by the Legislature of the State of Florida:

SECTION 1. There shall be levied and collected annually upon the assessable property of the State, a tax of one-half of one mill, to create a special fund for the maintenance and support of the State Board of Health, other than for maritime quarantine or maritime sanitation.

SEC. 2. That upon the presentation to the Comptroller, of any accounts, duly approved by the State Board of Health, accompanied by such itemized vouchers as shall be required by him, the Comptroller is hereby authorized to audit the same and draw a warrant on the State Treasurer for the amount for which the account is audited, payable out of the money received from the special tax provided for in Section 1 of this Act.

SEC. 3. The State Board of Health is hereby authorized to forward to the Comptroller of the State, at the end of each month, a requisition for a sum of not more than \$2,500 for current and incidental expenses for the ensuing month. Upon the receipt of such requisition, the Comptroller shall endorse on the same the amount that may be so required, and the Treasurer shall transmit the amount named in the requisition to the State Board of Health, which amount, so advanced,

shall be covered and accounted for to the Comptroller, by proper vouchers and payment of any unexpended balance during the current month, and before a succeeding monthly advance is made, and the Comptroller shall audit the accounts and vouchers, and draw his warrant upon the Treasury for the amount due thereon, and shall pay over to the Treasurer such warrant and any amount returned by the State Board of Health, as provided for in this section, taking up the requisition of the State Board of Health given to the Treasurer.

SEC. 4. All laws and parts of laws in conflict herewith are hereby repealed.

Approved June 1st, 1899.

AN ACT Creating a State Bureau of Vital Statistics, and a Registrar Thereof, and Requiring Reports of Births and Deaths, and Providing a Penalty for Failure to Make Such Reports.

Be it enacted by the Legislature of the State of Florida:

SECTION 1. The State Board of Health of Florida shall compile accurate vital statistics of marriages, births and deaths, occurring in the State, arranged by counties and incorporated cities, with statements of the prevailing diseases, and all information of a medical or sanitary nature that may be of value in the preservation of the public health, and for this purpose a State Bureau of Vital Statistics is created to be under the supervision of the State Health Officer as Registrar of said Bureau, with office at the office of the State Board of Health. The said Registrar of Vital Statistics shall formulate, print and furnish suitable blanks for collecting and compiling such statistics, and he shall, as often as once a month, tabulate and publish such statistics and furnish copies of the same to the incorporated cities within the State, and gratuitously distribute copies to persons, and to health boards of other states of the Union, as may be deemed advisable by the State Board of Health.

SEC. 2. Every birth and death occurring in this State shall be reported by the attending physician, midwife, nurse, or head of family, to the State Board of Health, or their agent, as soon thereafter as possible, on blanks furnished free, and in accordance with the forms prescribed by the State Board of Health. Where cities or towns have a health department, as a part of the municipal government, the report provided for may be rendered through the city or town health officer.

SEC. 3. Any physician, midwife, nurse, or head of a family, whose duty it is to make report, and who fails to make report, as required in Section 2, shall be guilty of a misdemeanor, and liable, upon conviction, to a fine of not more than fifty dollars, or imprisonment of not over thirty days, or both, in the discretion of the court.

SEC. 4. This Act shall take effect immediately upon its passage and approval by the Governor.

Approved May 11th, 1899.

AN ACT Providing for the Sanitary Inspection of Hotels and Boarding Houses, by the State Board of Health, and Prescribing a Penalty for Failure to Place and Keep Said Buildings in Sanitary Condition.

Be it enacted by the Legislature of the State of Florida:

SECTION 1. The State Board of Health shall cause, as often as may be necessary, upon information or complaint of any person, or at the request of any town or city council, or health officer, an examination to be made of any building or buildings, and the premises connected therewith, used for board and lodging of visitors or other persons, containing ten or more rooms, such examination to be made by or under the supervision of the State Board of Health, or by persons under its appointment, as soon as possible after such application or complaint shall have been made.

SEC. 2. That it shall be the purpose, in making such examination, to ascertain the source and sufficiency of the water supply, the quality of the water, the methods of removal of waste water, slops, excreta, house refuse, garbage, and all other putrescible matter of any kind, the ventilation available, and all other conditions relating to the health, sanitary conditions and safety of said buildings and premises. That for each inspection so made, the owner or managing occupant of the premises so inspected shall pay to the State Board of Health the sum of two dollars, if premises are found to be in unsanitary condition, which amount shall be used by said Board in defraying the expense of such inspection, and issuing the certificates hereinafter provided for.

SEC. 3. That upon the completion of such inspection, the said State Board of Health shall authorize the State Health Officer to issue a certificate reciting in detail the sanitary and other conditions of the examined premises, in accordance with the facts ascertained by such an examination, and such certificate shall forthwith be posted by the owner or managing occupant of such premises, in a safe and conspicuous place,

where it may be easily seen and read by all persons, guests or other occupants of said premises, and if the said certificate shall become defaced or destroyed, said managing occupant shall immediately procure a copy of the same, which shall be placed in a like conspicuous position, for which copy the State Board of Health shall not be entitled to receive any fee.

SEC. 4. Every owner, agent or lessee of any building or buildings used for the purpose of providing board and lodging for the entertainment of guests, containing ten rooms or more, who shall have obtained and posted a certificate provided for herein, may present the same as evidence in his defense in any suit in any of the courts in this State in which damages are claimed for injuries from alleged unsanitary conditions of said buildings and premises, and every owner, agent or lessee of any building opened for the purpose aforesaid, who has not had such sanitary examination of such buildings and premises as provided for herein, shall be liable for damages occasioned by such neglect, at the suit of any person injured thereby.

SEC. 5. That whenever, upon an examination of any premises, the inspection of which is required by this Act, it shall be found by said State Board of Health that the premises and buildings so inspected are in an unsanitary condition, such as to constitute a menace to the health and safety of the occupants thereof, it shall then be the duty of the said State Board of Health to cause to be posted upon some conspicuous place on said premises, a written or printed notice requiring the owner or managing occupant of said premises, or both, to make such changes, or to perform, or refrain from the performance, of such acts as may be necessary to place said premises in a sanitary and safe condition for the occupants thereof, within a reasonable time, to be fixed by said notice. That if the owner or managing occupant, or both, who shall be required by said notice from the State Board of Health to remedy such unsanitary conditions, shall fail to comply therewith within the time therein mentioned, he shall be guilty of a misdemeanor, punishable by fine not exceeding one hundred dollars, or imprisonment not to exceed thirty days, or both, in the discretion of the court.

SEC. 6. All laws or parts of laws in conflict with this Act, or any part thereof, are hereby repealed.

Approved May 11th, 1899.

AN ACT Regulating the Treatment of Suspicious Cases of Contagious or Infectious Diseases, Prescribing the Duties of State, County or Municipal Authorities Therein, and Providing for Necessary Costs and Expenses Thereof.

Be it enacted by the Legislature of the State of Florida:

SECTION 1. Whenever a physician or other person shall report a suspicious case of disease to the State Board of Health, as required by the provisions of Section 764 of the Revised Statutes of Florida, he shall also immediately give notice thereof to the City Health Officer, if there be any Health Officer, and if not, to the Mayor of the incorporated city or town in which the sick person may be, or if the sick person resides, or be found outside the limits of a city or town, to the County Health Physician or his representative, if there be any, and if not, to the Chairman of the County Commissioners of the county within which the sick person may be.

SEC. 2. It shall be the duty of the City or County Health Officer, or the Mayor, or the Chairman of the Board of County Commissioners, to whom a suspicious case of disease is reported, in accordance with the provisions of Section 1 of this Act, to take immediate measures to examine the case reported, to furnish medical attention, food, clothing, and whatever may be necessary to care for, segregate and guard such suspicious reported case, in accordance with the rules and regulations of the State Board of Health for the protection of the public health, now in force, or hereafter adopted, and shall manage and control such case or cases until the arrival of the State Health Officer or his agent.

SEC. 3. Whenever the State Health Officer shall investigate any suspicious case or cases of disease, in accordance with the provisions of Section 769 of the Revised Statutes, as amended by Section 1, Chapter 4348, Acts of Florida, 1895, and shall determine that such disease is contagious or infectious, and a menace to the public health of the citizens of the State then he or his agent shall assume charge and management of all and every such case of contagious and infectious disease. All necessary and legitimate expense attendant upon such case or cases of disease after the State Health Officer or his agent shall have investigated and determined the same, and assumed management and control, shall be paid out of the public health fund of the State, on vouchers approved by the President of the State Board of Health, as now provided by law.

SEC. 4. Any physician, city health officer, mayor, county

health physician, or chairman of the board of county commissioners, who shall neglect or fail to comply with the provisions of this Act, shall be deemed guilty of a misdemeanor, and, upon conviction, shall be liable to a fine of one hundred dollars, or imprisonment for thirty days, or both, in the discretion of the court having jurisdiction.

SEC. 5. All laws or parts of laws in conflict herewith are hereby repealed.

SEC. 6. This act shall go into effect immediately upon its passage and approval by the Governor.

Approved May 24th, 1899.

An act to appropriate \$20,000 to be used for the payment for the building, fumigating plants, wharves and other property, including boats of the Escambia County Board of Health, and to have title to the same confirmed in the State of Florida for the use of the State Board of Health.

Whereas, Chapter 4177, of the Laws of Florida, provided for the disposition of funds and effects in possession of the County Boards of Health, which were established by said act;

Whereas, the Escambia County Board of Health had, by the expenditure of its own funds, by local taxation, and otherwise, without aid from the State, erected buildings, fumigating plants, ballast cribs, and all other necessary constructions required in the proper operation of a quarantine station, at a cost of over \$60,000, and for the uses and purposes of protecting health, and for other quarantine purposes, and has also purchased naphtha launched and other boats, incident to, and requisite for, the proper conduct of a quarantine station, all of which said property is now in the possession of the State Board of Health.

Be it enacted by the Legislature of the State of Florida:

SECTION 1. That the sum of \$20,000, or so much thereof, as may be agreed upon by the County Commissioners of Escambia County and the State Board of Health of Florida, be and the same is hereby appropriated, payable out of the surplus proceeds of the Pensacola Maritime Station within a period of three years, to be expended in the payment for the buildings, fumigating plants, wharves, launches, small boats and all other property used by said Escambia County Board of Health in the operation of its quarantine station. Provided, this payment meets the approval of the State Board of Health, and Provided, further, That all of said property

shall at once be conveyed by proper instruments of writing to the State of Florida for the use of the State Board of Health.

SEC. 2. That the money herein appropriated in Section 1 of this Act, shall be paid by the Treasurer of the State Board of Health Fund to the County Commissioners of Escambia County, two-thirds thereof shall be paid by said County Commissioners of the city of Pensacola for city purposes, and the balance shall be placed in the general revenue fund of said county.

SEC. 3. This act shall take effect immediately upon its passage and approval by the Governor.

Approved May 22d, 1899.

AN ACT Making an Appropriation for the Immediate Necessities of the State Board of Health, and Providing for a Proper Official Receipt for all Moneys Paid to the State Board of Health.

Be it enacted by the Legislature of the State of Florida:

SECTION 1. That the sum of fifteen thousand dollars, or so much thereof as is necessary, is hereby appropriated out of any money in the State Treasury, not otherwise appropriated, for the immediate necessities of the State Board of Health, as shown by the State Health Officer in an official statement of indebtedness.

SEC. 2. Vouchers and receipts signed by the State Health Officer shall be legal receipts for all moneys paid to the State Board of Health.

SEC. 3. All laws and parts of laws in conflict with this Act be, and the same are hereby, repealed.

SEC. 4. This Act shall take effect immediately upon its passage and approval by the Governor.

Approved May 27th, 1899.

COUNTY SANITARY AGENTS.

When the statute of 1889, creating a State Board of Health, was passed, provision was made for the appointment of County Boards of Health, with the hope that they would be useful and valuable adjuncts in the conservation of the public health. It was shortly ascertained, however, that divided responsibility occasioned confusion, and indifferent results, and succeeding Legislatures amended the law, abolishing these county health organizations. The State Board of Health then, from time to time, appointed agents in the several counties to represent these interests, to take cognizance of any deviations

from the normal health of the State, to promptly report and take charge of cases of contagious disease, to abate sanitary nuisances and to perform many other and similar functions. These appointments were commissions of honor and trust, rather than of emolument, because of the limited revenue of the Board. They were appointed only in and for the larger and more populous counties, and each agent was allowed the small monthly stipend of ten dollars. This amount given to each agent monthly, though apparently insignificant when considered separately, equals, at present, nearly six thousand dollars annually. Until recently, there was very little for the county sanitary agents to do, other than render a monthly report of the general health and sanitary condition of the county, follow up and remedy sanitary nuisances, issue transportation and burial permits, and generally supervise the health status of their respective bailiwicks. The principal advantage obtaining to the State accrued from the moral influence exerted and the benefit of having salaried medical representatives in so many different sections. Their duties consumed but little time, even when taken from a possible busy practice, and the compensation was deemed commensurate with the services rendered. Within the past eighteen months, however, smallpox has been repeatedly introduced into Florida from the States adjoining, and these county agents have been called upon to devote much time and suffer no inconsiderable trouble and annoyance in fulfilling their functions as county health officers. Some have demurred to this demand upon their time and practice without additional compensation, while others, seemingly recognizing the aggregate received for less engrossing services in the years past, have cheerfully and commendably taken hold and performed valuable and efficient work without hint of future expectations or of further pecuniary reward. It is recognized that the State has no more moral right than the individual citizen to demand the time of anyone without adequate compensation, and it has only been the lack of funds which has prevented the State Health Officer from strongly insisting that the medical representatives of the Board, who have rendered public service in their respective counties, in the smallpox prevalence of the past year, should be properly paid. While, in some sections, as has been stated, the county sanitary agents have managed the outbreaks of smallpox in their neighborhood, yet, in many instances, this unusual condition has made it necessary to despatch a special representative of the Board to the seat of the trouble, to take charge, direct and counsel, all of which has been at an extra expense to the State. In view of these facts, and from a careful study of the matter, it

is suggested that, instead of endeavoring to maintain agents in each of the forty-five counties, as at present, too inadequately recompensed to surrender more than a modicum of their time to the duties involved, that three medical assistants to the State Health Officer, or special agents, be appointed, at an annual salary of fifteen hundred dollars, with necessary traveling expenses when away from home. These special agents to devote their entire time and attention to these matters, going from place to place on regular tours of inspection, and being available at a moment's notice, to be dispatched to any point in the State where the services of the State Board of Health may be required to diagnose, investigate or manage contagious or infectious disease, to inquire into and abate sanitary evils, to see that the rules and regulations of the Board are observed, and in many ways and means to accomplish what is now sought for, but cannot be obtained by the system in existence. The State Health Officer has heretofore refused to recommend this plan of health supervision, because of his attachment to his medical associates in the various counties, and because in relieving them from a position which many of them have held continuously for six or seven years, he did not wish—by indirect inference even—to imply that he had lost confidence in their ability, integrity or efficiency. The lessons of the past eighteen months, however, are convincing that better results can be obtained, at a less expenditure, by the adoption of the recommendation to abolish the present county agent system and appoint three special agents.

QUARANTINE STATIONS.

The maritime quarantine service was conducted throughout the year as usual at the various quarantine stations, without change in the personnel of the several medical officers heretofore in charge. As will be seen by reference to the table of receipts and expenses, the Maritime Quarantine Department of the State Health Service was self-supporting, the revenue derived from inspection and disinfection fees being sufficient to meet the running expenses. The Cumberland Sound Quarantine Station, near Fernandina, which was destroyed by the storm of October, 1898, was ordered rebuilt by the Board when in session at Port Tampa, in July, 1899, at a cost not to exceed \$6,000. It was determined to erect the new station on Amelia Island, instead of in the open harbor, as formerly, a site on the Fort Clinch military reservation being obtained from the Government. In consequence of the lateness of the season when it was finally decided to re-establish this plant,



and the absence of the Assistant State Health Officer at Miami, where he was engaged in connection with the yellow fever epidemic, as reported elsewhere, no active work was inaugurated. It is hoped, however, to have the equipment in working order early, if not at the beginning of the quarantine season. Soon after the destruction of this station in 1898, the submerged machinery was raised, at a cost of five hundred dollars, and stored on the mainland, where temporary quarantine quarters were constructed, and the subsequent operations of the station carried on. Through aid derived from the Florida East Coast Railway Company, in the loan of the steamer "Santa Lucia," and other assistance, a sterilizing plant was installed at Miami, during the latter part of August, at a cost of \$3,771.58. This station was, fortunately, most opportunely equipped, becoming available just prior to the outbreak of yellow fever at Miami, where it was of great utility in the disinfection of vessels arriving during the epidemic, and in the destruction of *fomites* in the cleansing of the town on the termination of the epidemic. During a severe storm early in August of last year, the quarantine station wharf, buildings and launch at Dog Island, Saint George's Sound, were almost totally wrecked, the officer in charge, Dr. L. S. Smith, and his assistants barely escaping with their lives, after enduring great peril and hardships for three days. It is estimated that it will cost at least \$1,200 to repair this dwelling and wharf. Upon the loss of the station, arrangements were immediately perfected for conducting the quarantine operations from the mainland, and accommodations were secured and the crew and apparatus installed at Carrabelle, from which point the service is now being performed. Some slight repairs have been necessary from time to time at the other quarantine stations, such as new smokestack at Key West, the renewal of some piling and woodwork at the Tampa Bay Station and a new wharf and cistern at Charlotte Harbor.

It is with great regret that the Board is informed of the resignation of Dr. D. M. Echemendia, of the Tampa Bay Quarantine Station. For ten years Dr. Echemendia has been the faithful sentinel at the most important of the State's quarantine stations, and that he has faithfully performed his duty and been loyal to the trust reposed in him, is evidenced by the exclusion of contagious disease from the southern peninsula as long as the State was permitted to carry on uninterruptedly and undividedly the maritime sanitary system which the State Board of Health had formulated and operated during the ten years previous to the war with Spain. Advancing years and physical infirmities induced Dr. Echemendia to resign a posi-

tion which calls for much hard labor, exposure and anxiety. The State Health Officer parts with him with much reluctance, thanking him for his devotion to duty, and unswerving allegiance to principles to which the State Board of Health owes its existence.

FREE TELEGRAPHIC SERVICE.

Through the courteous representation of Mr. B. F. Dillon, superintendent of Jacksonville, the Western Union Telegraph Company, by Vice President Clarke, rendered timely service to the State Board of Health by permitting the State Health Office to be in close telegraphic touch with the office at all times, free of any expense to the Board. It can readily be appreciated what assistance this courtesy yielded by rendering it possible for the executive officer of the Board to direct, through his office at Jacksonville, the varied movements of his assistants, and to control measures which would otherwise have been done either at great expense, or have required a personal presence. The thanks of the State Health Officer, as an official and citizen of Florida, are tendered to Vice-President Clarke and Superintendent Dillon for their considerate kindness in this matter.

FINANCES.

The enactment of the last Legislature, definitely fixing the annual income of the Board on the basis of the half-mill tax levy, and making a special appropriation of \$15,000 to cover the deficit of the previous year, caused by the extraordinary expenses connected with the pandemic presence of smallpox in the State, relieved the Board from the financial embarrassment which confronted it at the time of the last report of the State Health Officer; and the ready response of the Governor and State Treasurer to requests for prompt attention to requisitions, during the crisis of the past summer and fall, enabled the executive office of the Board to act expeditiously and vigorously in meeting the demands occasioned by the two yellow fever epidemics. As will be seen by a reference to the tabulated statements, on another page, the current or running expenses of the Board amounted to \$18,021.78; to which must be added—an usual and extraordinary expense—the cost of the epidemics at Miami (\$11,134.17) and Key West (\$3,151.13), and the aggregate (\$17,430.34) for caring for the smallpox outbreaks in various parts of the State. This latter item, it will be noticed, somewhat exceeds the special appropriation of \$15,000, made by the last Legislature, nor does the amount include all the items of this source of expense to the State, as a settlement



was not had with the city of Jacksonville until after the close of the year, and the amount reimbursed that municipality (\$2,776.22) is therefore not embraced in the tabulated statements of 1899. In the matter of quarantine receipts and expenses, it will be observed by reference to the statements of that fund, that the maritime quarantine department of the Board was practically self-supporting in 1899, as it has been for the past several years, the receipts just about offsetting the cost of operating.

EXPENDITURES FOR 1899.

Current Expenses:

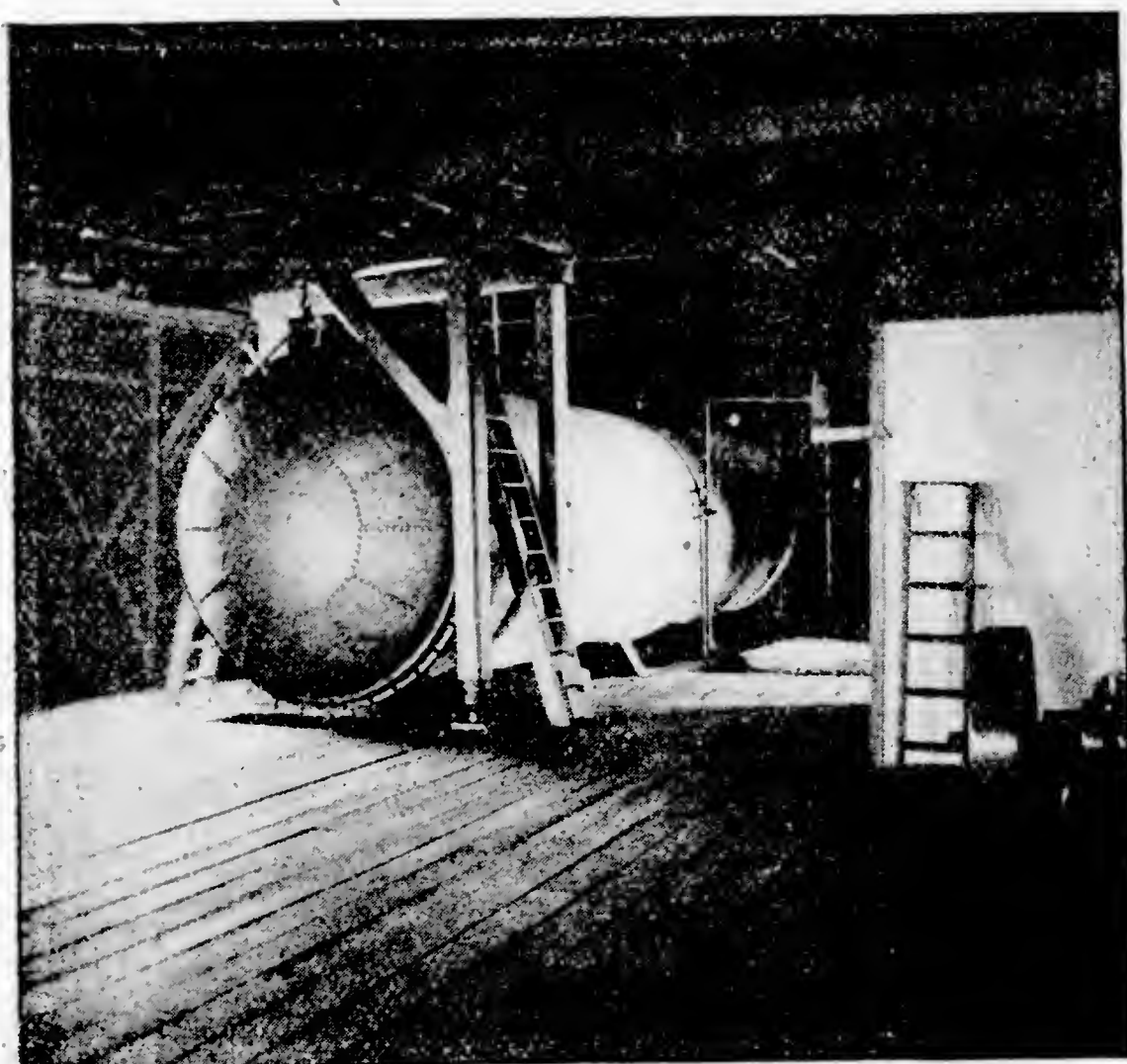
Per diem and mileage of members.....	\$ 295.60
Salary of State Health Officer.....	3,000.00
Traveling Expenses of State Health Officer.....	472.06
Clerical assistance.....	2,510.00
Attorney's salary.....	435.00
Office rents, lights, telephones, etc.....	752.00
Printing "Notes," stationery, stamps, envelopes, blanks, etc.....	1,541.65
Telegraph tolls.....	878.35
Salaries of County Sanitary Agents.....	7,213.93
Diphtheria antitoxin.....	106.36
Purchase of formaldehyde regenerators.....	273.87
Miscellaneous, insurance, interest, e c., etc.,.....	547.96

Total \$ 18,021.78

Extraordinary and Unusual Expenses:

Smallpox cases and cost of vaccine virus.....	\$ 17,430.00
Yellow fever epidemic, Key West.....	3,151.13
Yellow fever epidemic, Miami.....	11,134.17
Yellow fever cases, Port Tampa City.....	277.00
Purchase Naphtha Launch for Tampa Bay Sta- tion.....	1,080.00
Raising submerged machinery, Fernandina Station	500.00

Total..... \$33,572.64



Receipts and Expenses Several Quarantine Stations.

	Expenses.	Receipts.	Excess.	Deficit.
Santa Rosa Sound.....	\$19,761 10	\$27,223 78	\$7,461 68	.....
Tampa Bay	5,479 65	3,782 40	.....	\$1,697 25
Key West.....	3,003 22	2,653 90	.....	349 32
Fernandina.....	2,803 73	2,505 00	.....	298 73
Mayport.....	1,248 53	1,970 00	821 47	.....
Carrabelle.....	2,619 23	1,135 00	.....	1,484 23
Charlotte Harbor.....	2,499 11	553 00	.....	1,946 11
Miami.....	1,861 50	248 00	.....	1,613 50
Sale of Germ.....	.....	2,500 00	2,500 00	.....
Cedar Key	385 00	.....	.....	.....
Anclote.....	400 00	.....	.....	400 00
Apalachicola.....	300 00	33 34	.....	266 66
Miscellaneous	1,686 96	.....	.....	1,686 96
	\$41,949 03	\$42,604 42	\$10,783 15	\$10,137 76

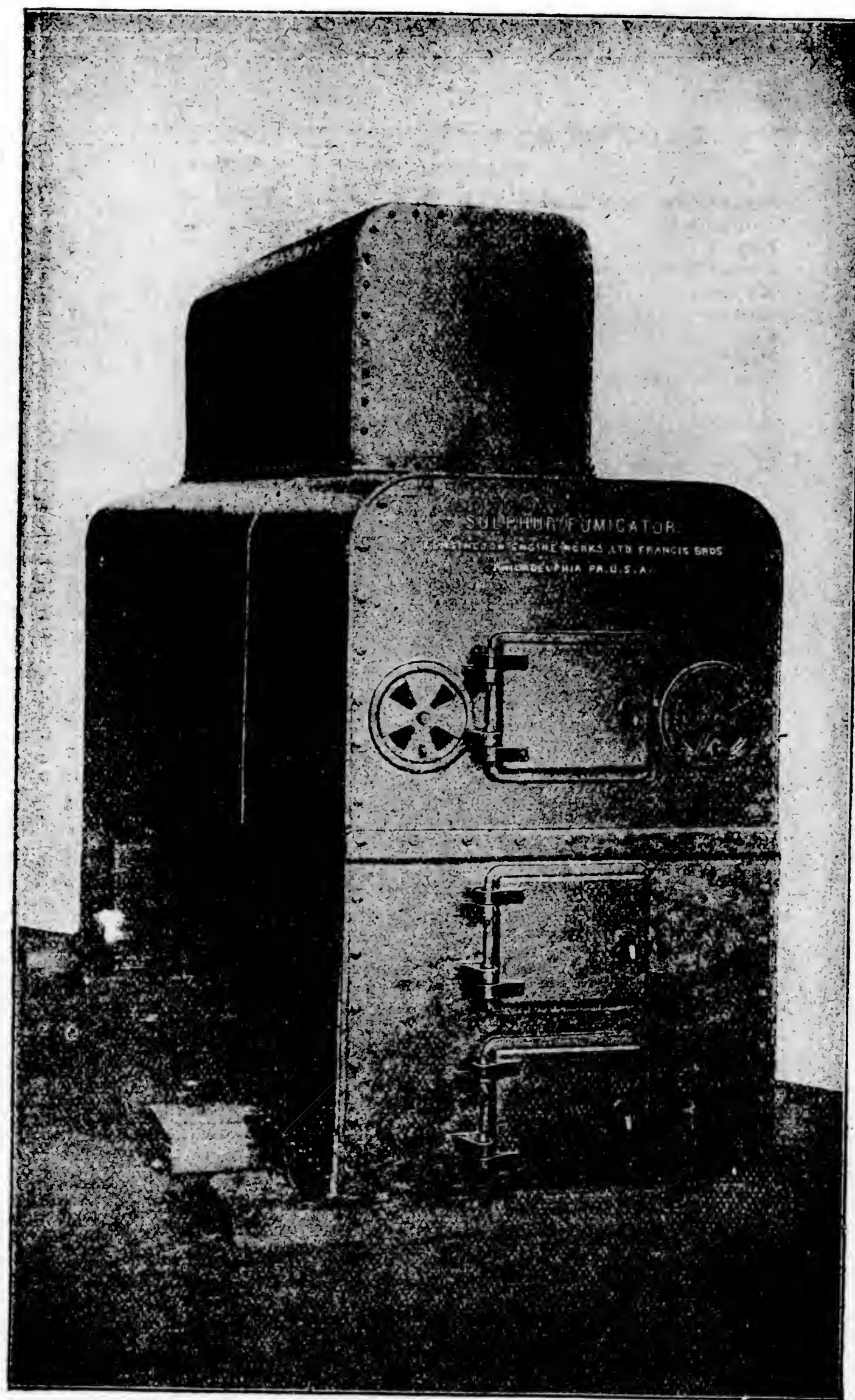
VITAL STATISTICS.

This division of the work of the Board has received unremitting attention, and with gratifying results, for the birth and death returns were made far more satisfactorily than during any year during the commencement of the work in July, 1893. The office of the Board is solicited almost daily for certificates of the records, to be used in litigation, in establishing pension claims, etc., etc. The English people residing in Florida are particularly careful to have attested copies of their birth and death records forwarded to the old country for registration. But it is unnecessary to dwell upon this subject, as it has been exhaustively discussed in almost every annual report of the State Health Officer, and it is here mentioned merely to invite attention to the statistical tables accompanying this report.

RECOMMENDATIONS.

In concluding the report of the State Health Officer, it is usually the practice to offer such recommendations for the attention of the Board as his study of the health problems of the State and experiences of the year may suggest. Adhering to this custom, your executive officer submits the following:

First: It is hoped that a change will be made in the County Sanitary Agent System, for the reasons set forth when discussing this subject elsewhere, by the immediate discontinuance of the existing plan of having a meagerly paid medical representative in each county, and the appointment of three special agents or medical inspectors, as assistants to the State Health Officer. These gentlemen to be given a yearly stipend of \$1,600 and actual travelling expenses. It is not



SULPHUR FURNACE AT TAMPA BAY QUARANTINE STATION.

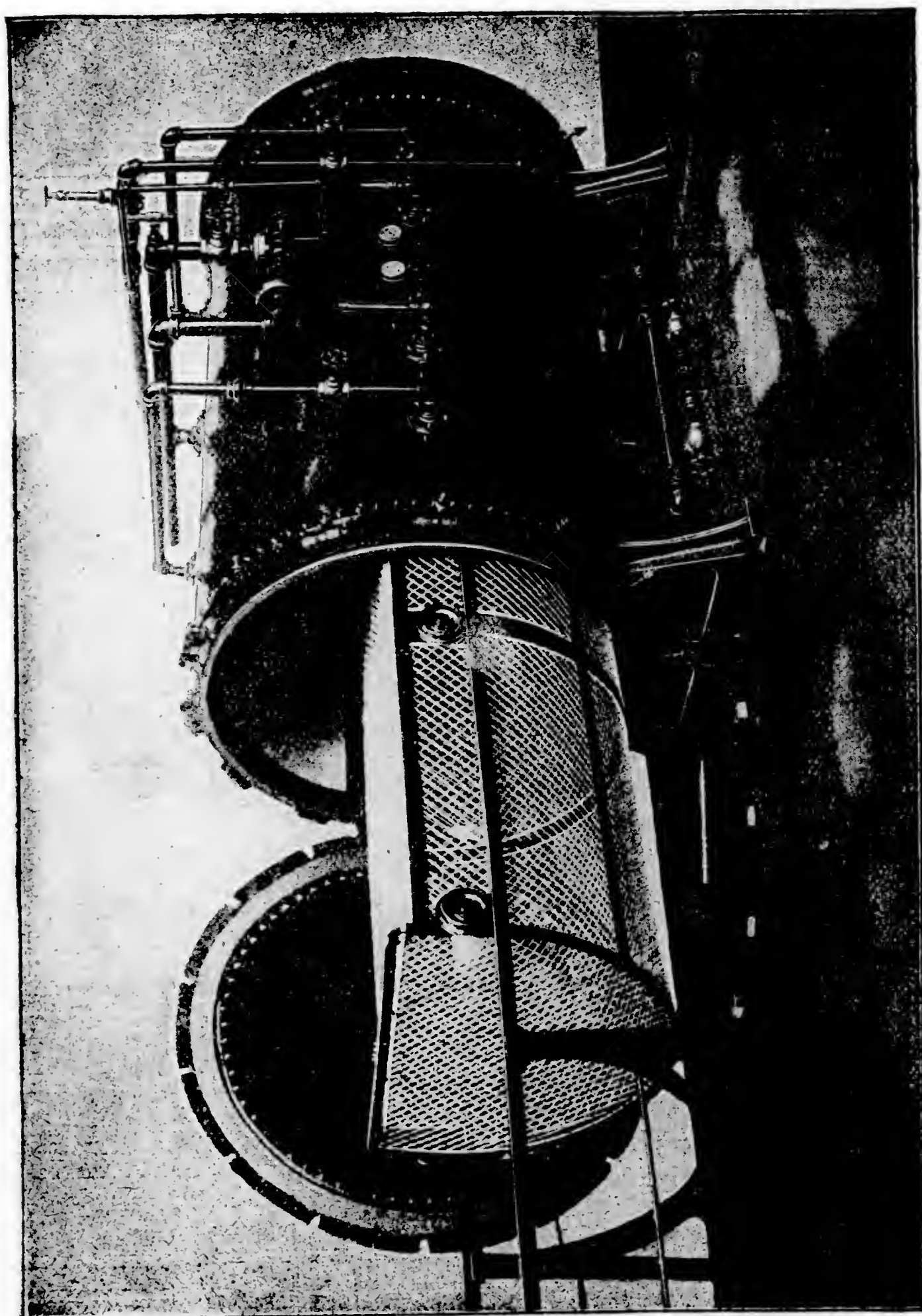
thought necessary to reiterate the arguments of economy, a greater efficiency and a better health service, already dwelt upon.

Second: That these employes of the Board be entered in the service on a gradient scale, similar to that in vogue in the United States departments—that is to say, for the first five years they shall be given \$1,600 annually, and after that term of employment to be paid \$1,800 a year, which sum shall be the maximum. At the quarantine stations, the Board to supply food and suitable housing. All applicants to pass an examination to evidence a certain amount of knowledge in hygiene and sanitation, and the ability to recognize, diagnose and manage contagious diseases.

Third: The recommendation of previous years, regarding the urgent necessity for a steamer for coast patrol duty, to supply the place of the *Germ*, which was sold last year for \$2,500, by order of the Board, is again urged. The experiences of the past summer plainly emphasize the fact that a vessel of the description mentioned in previous annual reports is essential, if the State Health Officer is to be enabled to visit the various quarantine stations regularly, and especially in case of emergency. It is not always possible nor practicable for the State Health Officer to avail himself of the commercial lines of travel, which ply on schedules. Had the Board possessed such a craft this past summer, the personal supervision of the State Health Officer of the three points of suspense could have been accomplished, and his movements between Miami, Key West and Port Tampa City so facilitated as to enable him to pass rapidly from one to the other. As it was, this was rendered impracticable by the necessity of awaiting the arrival and departure of the scheduled steamers and the long land detours otherwise unavoidable.

Fourth: The following amendments and additions to the rules and regulations are submitted for adoption:

Rule 56. *Unvaccinated Workmen, Clerks or Laborers not to be employed.* No owner, lessor, manager, superintendent or agent, operating any manufactory, phosphate plant, saw-mill, turpentine still, store, railroad or other business employing workmen, laborers or gang of men, women or children, who work, sleep, or eat together, shall employ any man, woman or child who cannot produce satisfactory evidence of having been successfully vaccinated within five years of such employment. And it shall be the duty of such owner, lessor, superintendent, manager or agent, to see that such employes are vaccinated as often as the health officers of the State, city, town or county, in which said business is located may direct.



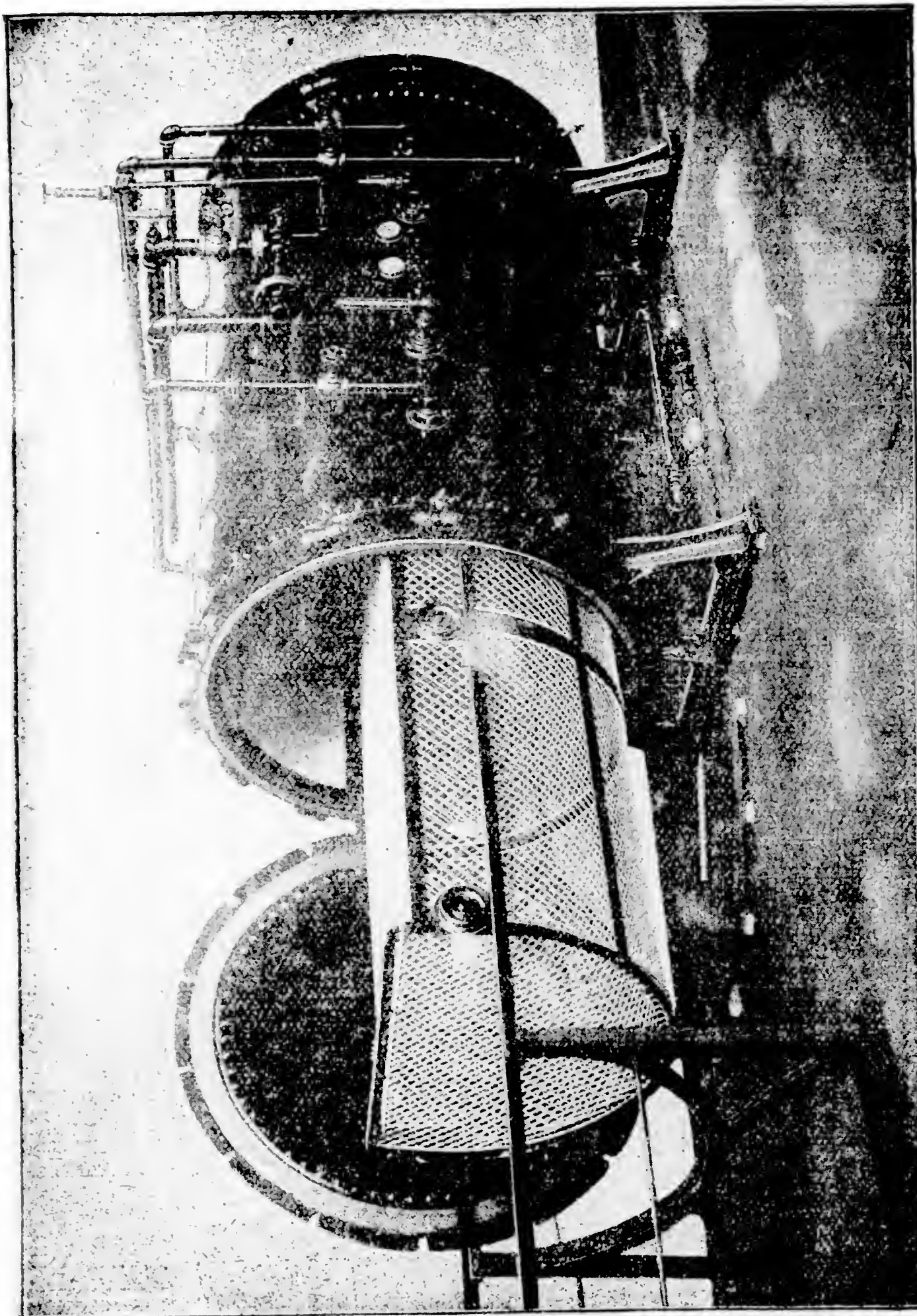
STERILIZER AT KEY WEST QUARANTINE STATION.

Rule 51½. *Penalty for concealing cases of communicable diseases, or for secreting fomites.* Any person who shall wilfully or knowingly conceal any case of yellow fever, scarlet fever, smallpox, cholera or other infectious or contagious disease, or who shall secrete any personal clothing, bedding or other article which has been used, in or about any case of infectious or contagious disease, and is liable to convey or impart contagion or infection, from the proper State or local health officers, shall be guilty of a misdemeanor, and upon conviction thereof, shall be punished as provided by Rule 49.

As the concluding lines of this report are being penned, the announcement is made of the death of Colonel Horatio Crain, of Key West, and is both fitting and a privilege to pay a tribute to his memory. Colonel Crain, from the time when health matters in Florida assumed more than a mere perfunctory existence, had been a warm advocate of sanitary principles and a firm and ardent defender of all laws and regulations tending to exclude disease, promote health and increase the longevity of the citizens of the State. In the early days of the State Board of Health, when the Board, so to speak, was on trial, and was viewed by the people in the light of an experimentation, Colonel Crain manfully defended the course adopted, and by pen and speech, and at the risk of incurring personal enemies and injury to business—for at one time the opposition to the Board was malignant, and especially at Key West—Colonel Crain was the brave fighter for the right, and the State's gallant soldier in the battle commenced and successfully waged against narrow mindedness and prejudice in sanitary matters.

It is a pleasure to testify to and publicly express the obligations which the writer feels under to Colonel Crain for his counsel, advice, and every timely aid. He was a friend in every sense of the word, in the days to come his loss will be more and more felt by the community in which he has lived for so many years, and by those whom he delighted to assist in every good work. A sanitarian himself of the purest order, his heart was especially in the work of philanthropy and benevolence, and no opportunity was ever lost to appeal for chaste living, that each and all might secure the many natural gifts and blessings which the Great Creator has placed within the reach of His children. Colonel Crain died as he lived, quietly and resignedly. He had no misgivings for the future; his trust was unflinching, his faith confident.

Again thanking my associates in the health work of the State—particularly the County Sanitary Agents and the va-



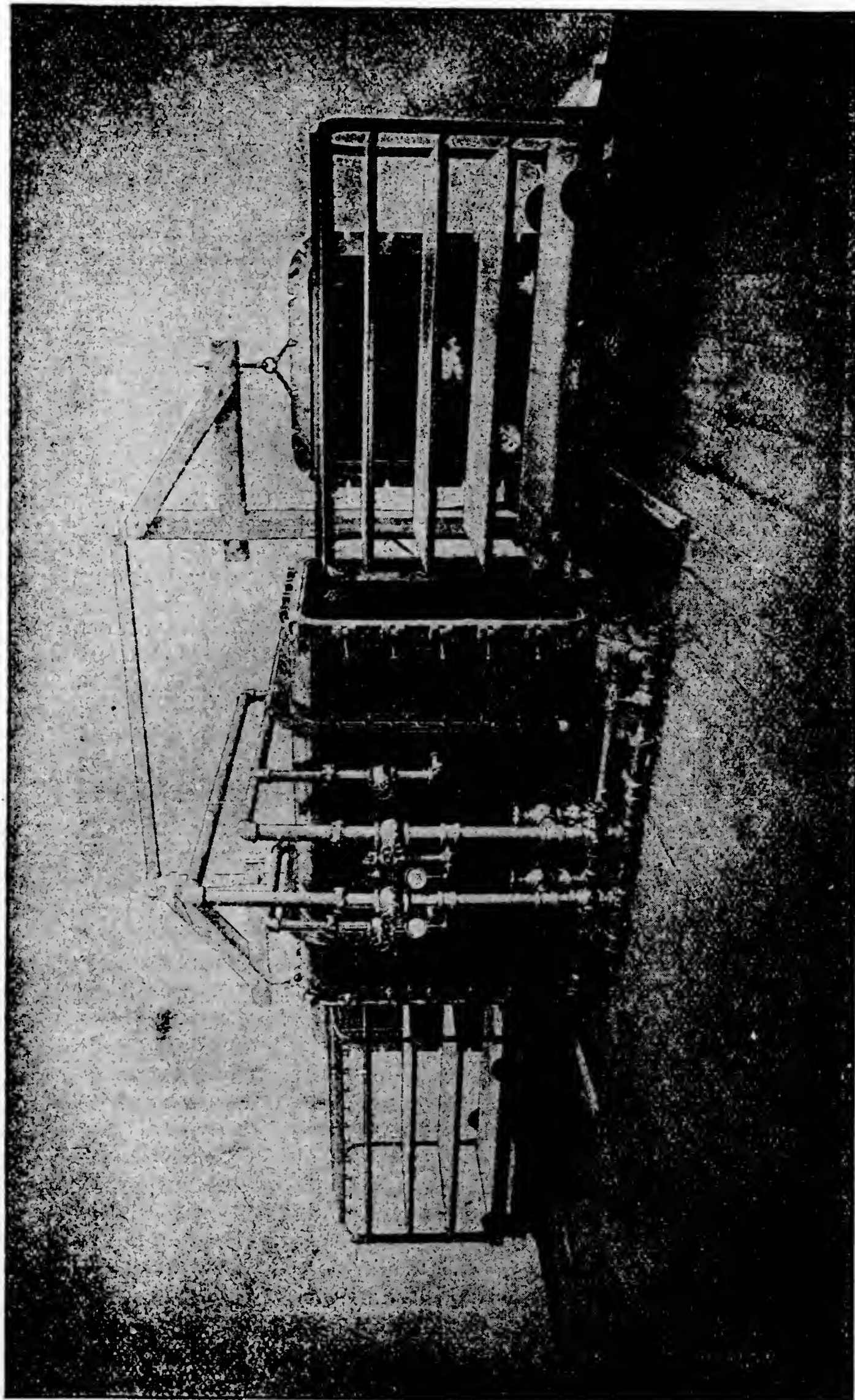
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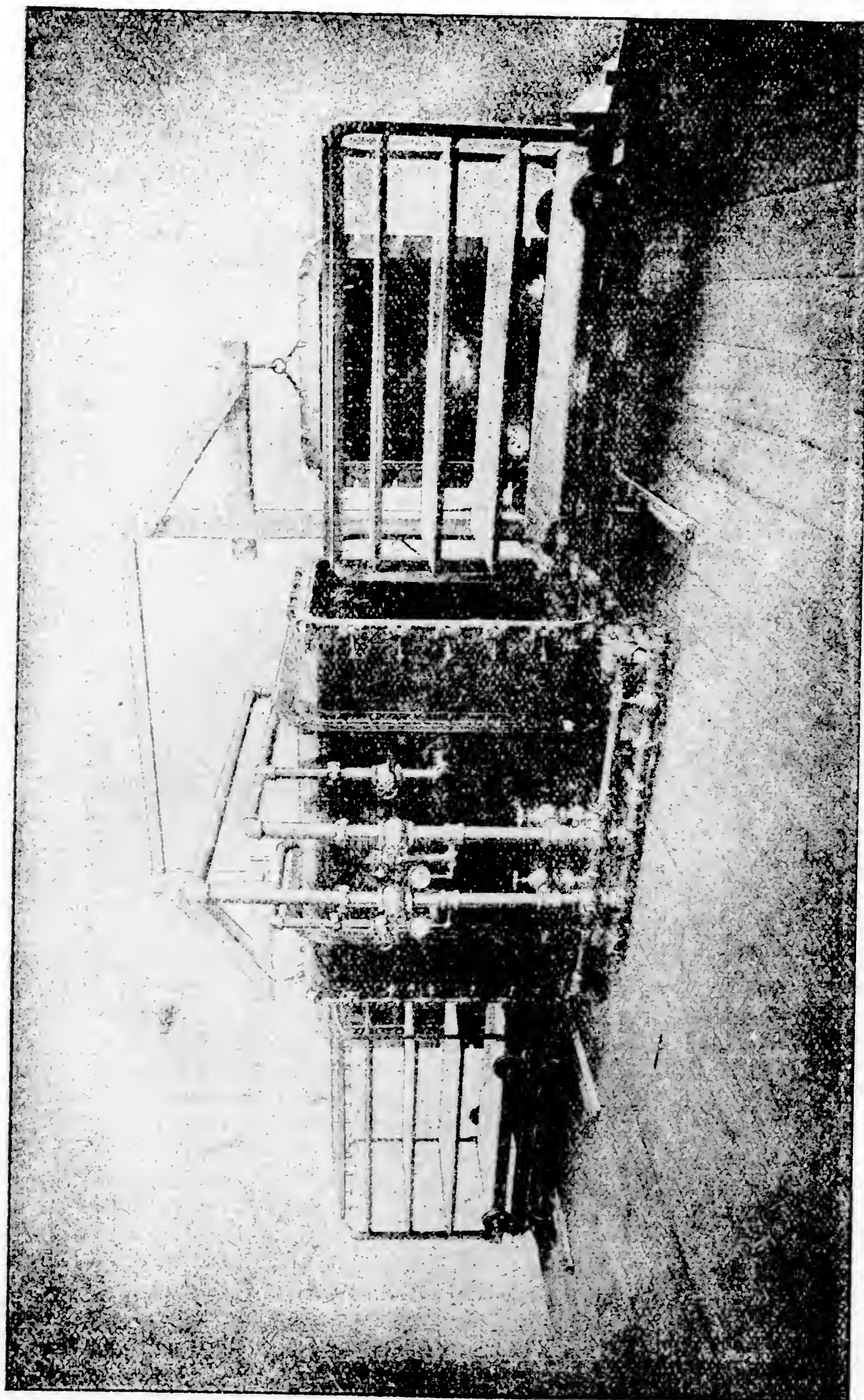


STERILIZING CHAMBER AT FERNANDINA QUARANTINE STATION.

rious Maritime Quarantine Officers—for their earnest support in matters calculated to benefit the people of our beloved Commonwealth, and to whose loyal help and devotion to the "common cause" must be ascribed much of the success which has crowned the efforts of the Board, I am, gentlemen,

Respectfully yours,

JOSEPH Y. PORTER, M. D.,
State Health Officer of Florida.



STERILIZING CHAMBER AT FERNANDINA QUARANTINE STATION.

149

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APPENDIX.





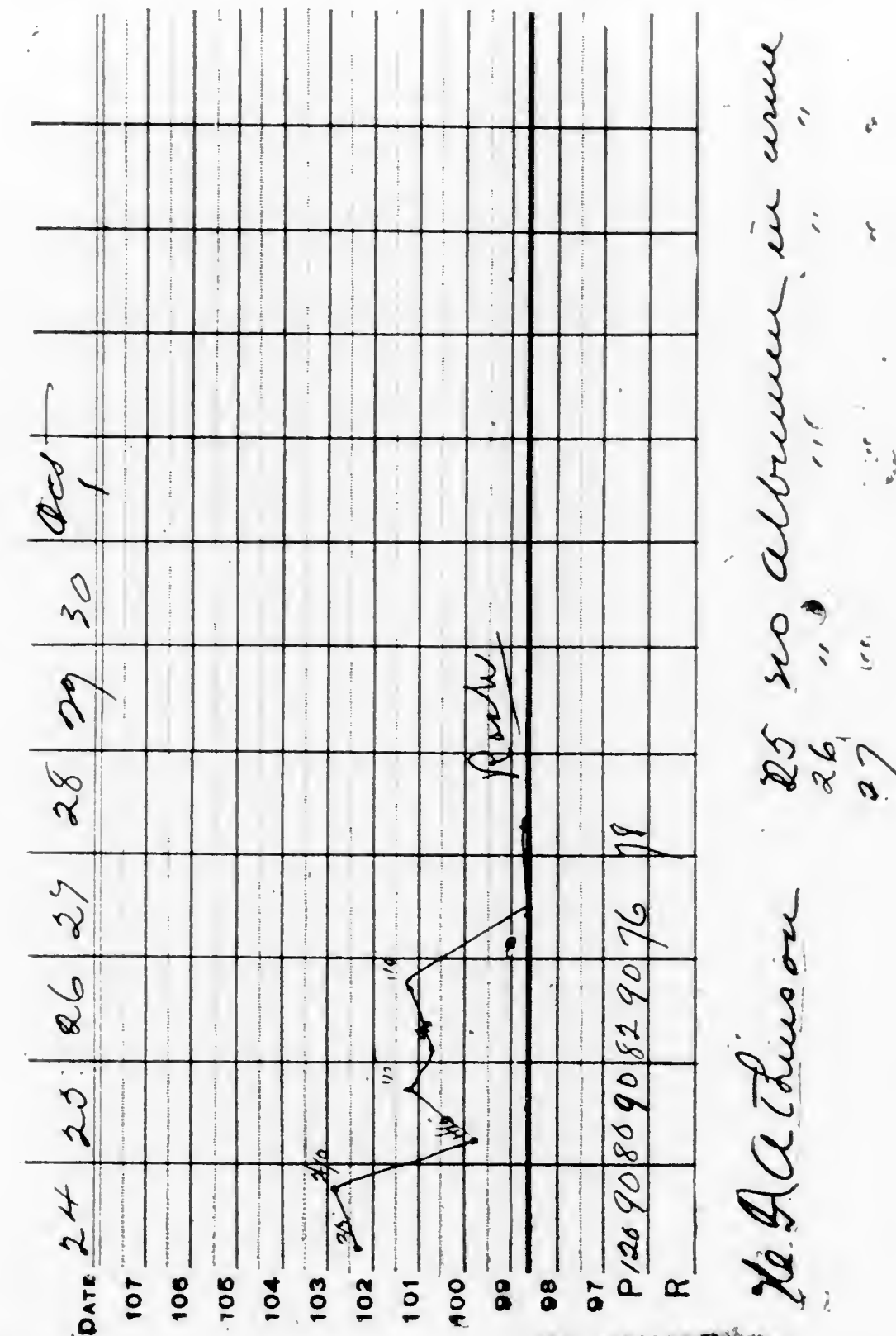
APPENDIX.



In presenting the following charts, attention is called to the fact that the charts on pages 153 to and including 173—with the exception of 162 (Hargrove case)—are all dengue cases. The charts on pages 174, 175, *et seq.*, indicate their respective diagnosis. It will be observed that some having had dengue later developed yellow fever—for instance, T. C. Bass, dengue (page 178), yellow fever (183). Verner Townley, page 184, dengue; page 177, yellow fever. G. L. Chandler, yellow fever, page 182, and dengue, 185, etc., etc.

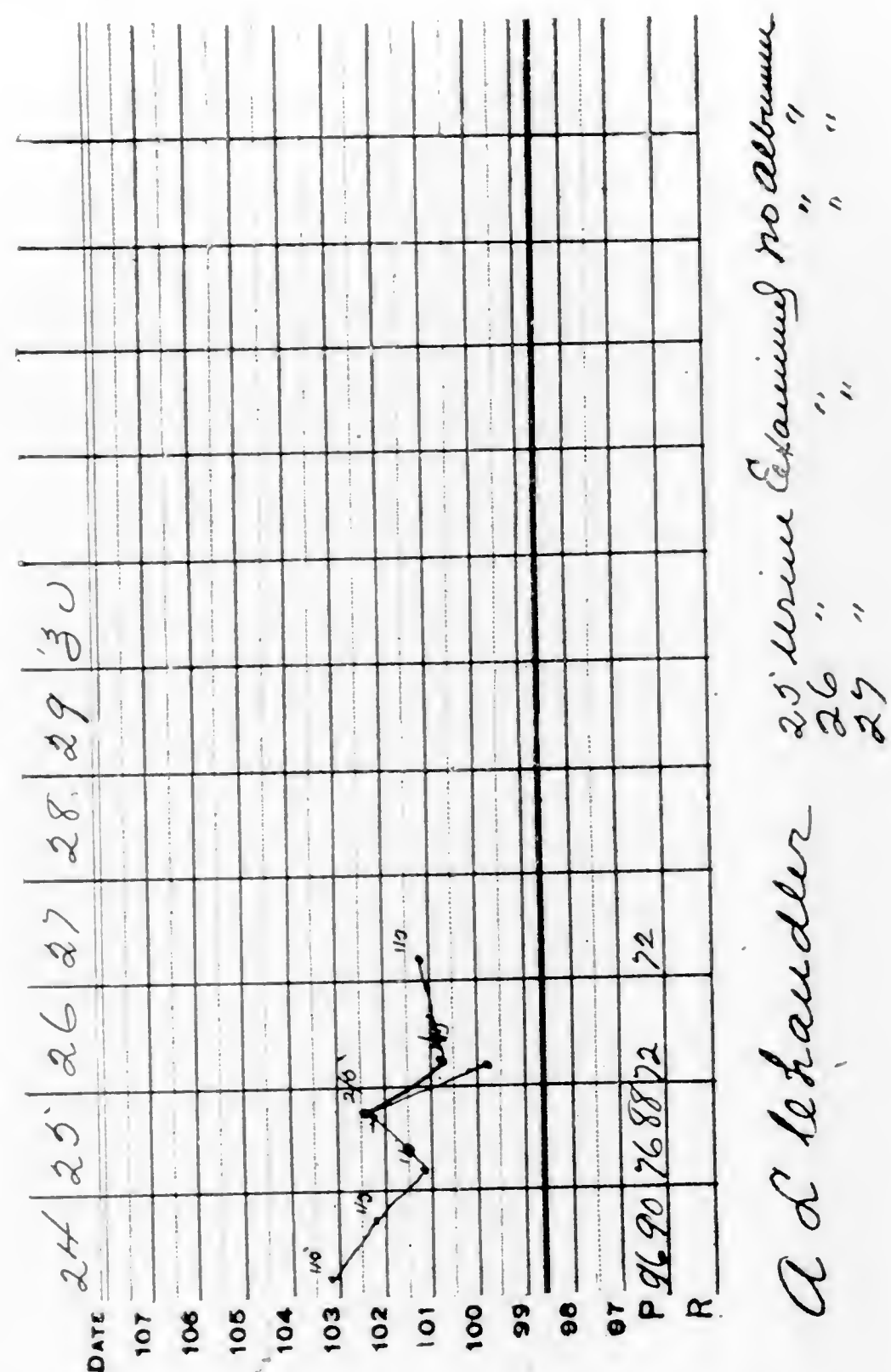
Bedside Charts, Dr. Jackson's Cases.

Commenced to feel bad Thursday up till Saturday; saw him Sunday. Pain in back, frontal headache; setting up, but



weak; was out to dinner. Slept well 24th; was around room 25th; around room reading and smoking, attending law office 26th.

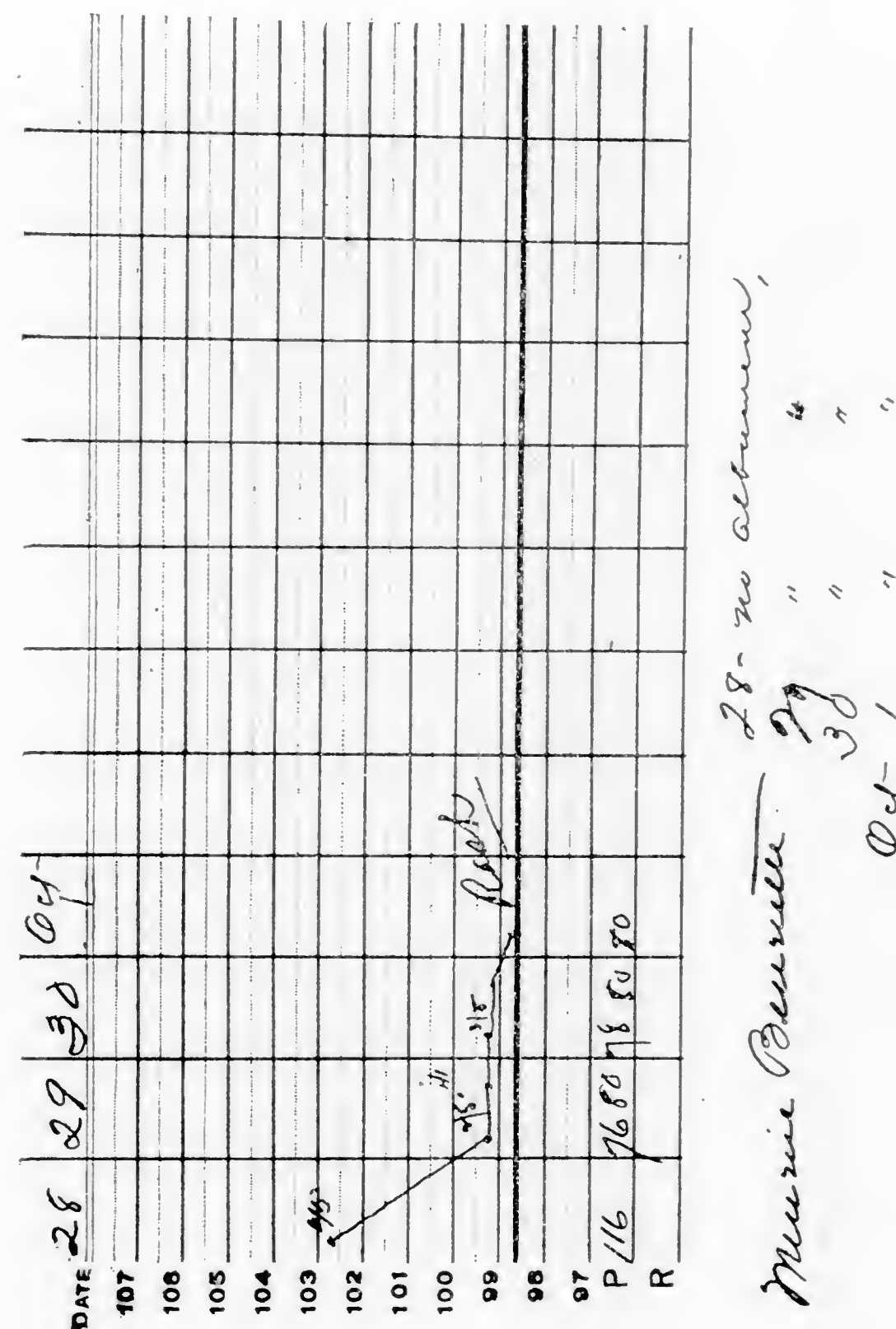
Taken 5 p. m., while down town; went home with fever, headache, pain in back limbs, with fever; rested but little;



rested better during day. Slept during day and Sunday night; rested fairly Monday, wanting fruit, ice cream, etc.; also intense soreness all over. Tuesday did very well; soreness still continues; 27th, head still aches, but nervous over fever scare and went to woods.

Treatment: Cal. soda, acetanolid comp. Urine examined, and no trace of albumen at any time; no jaundice.

Taken 7 p. m., 27th; pain in head, back and bones, diarrhoea on 26th; checked same and some vomiting; and taken on

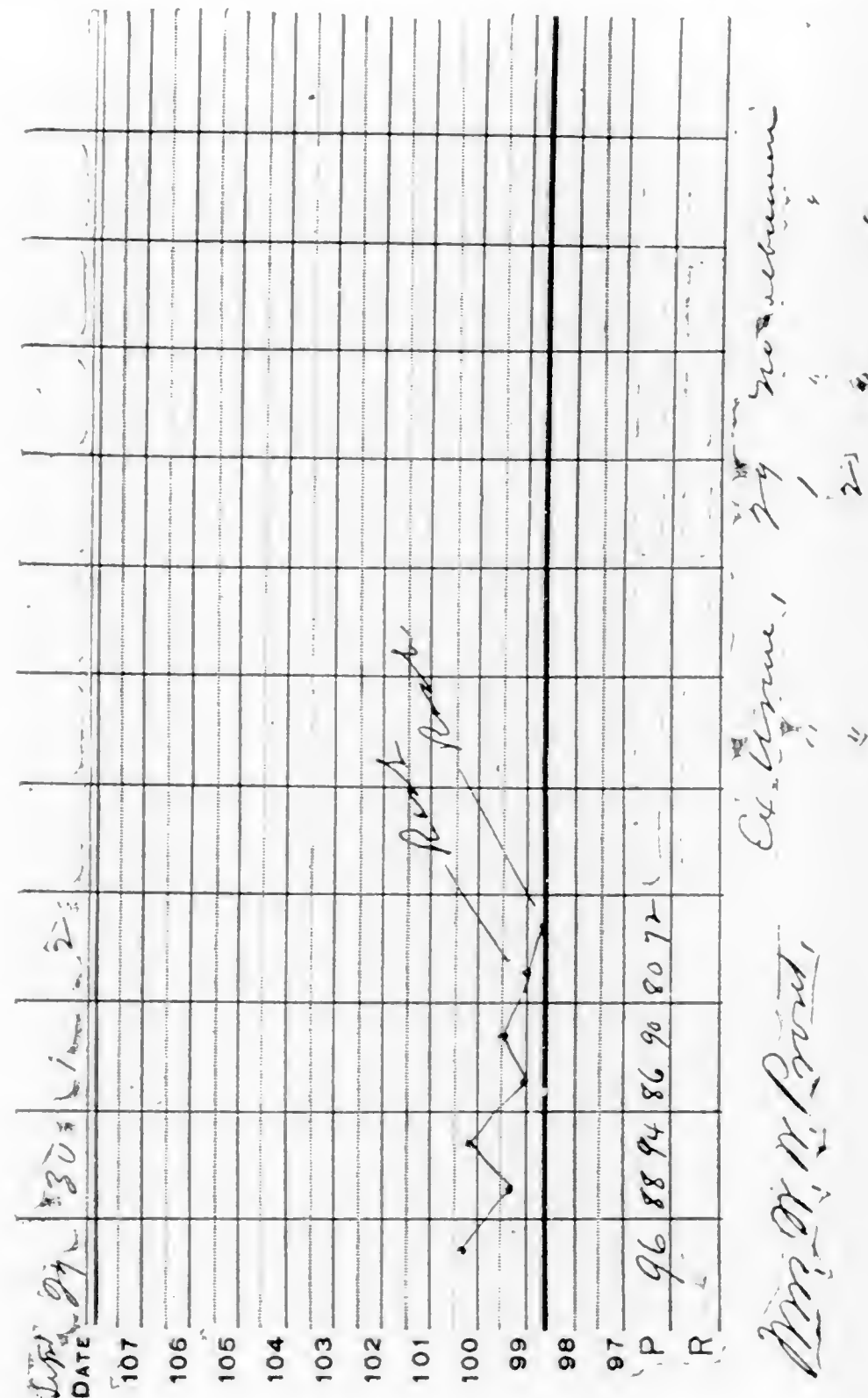


28th, tongue large, flabby and coated; eyes clear; menstruating and checked on 25th, came on again on 27th.

CLINICAL HISTORY.

Felt bad night of 29th; had pain head, back and every bone of body; bowels constipated, eyes sensitive to light, skin moist and cool.

September 30.—Slept well last night; no headache, but feels

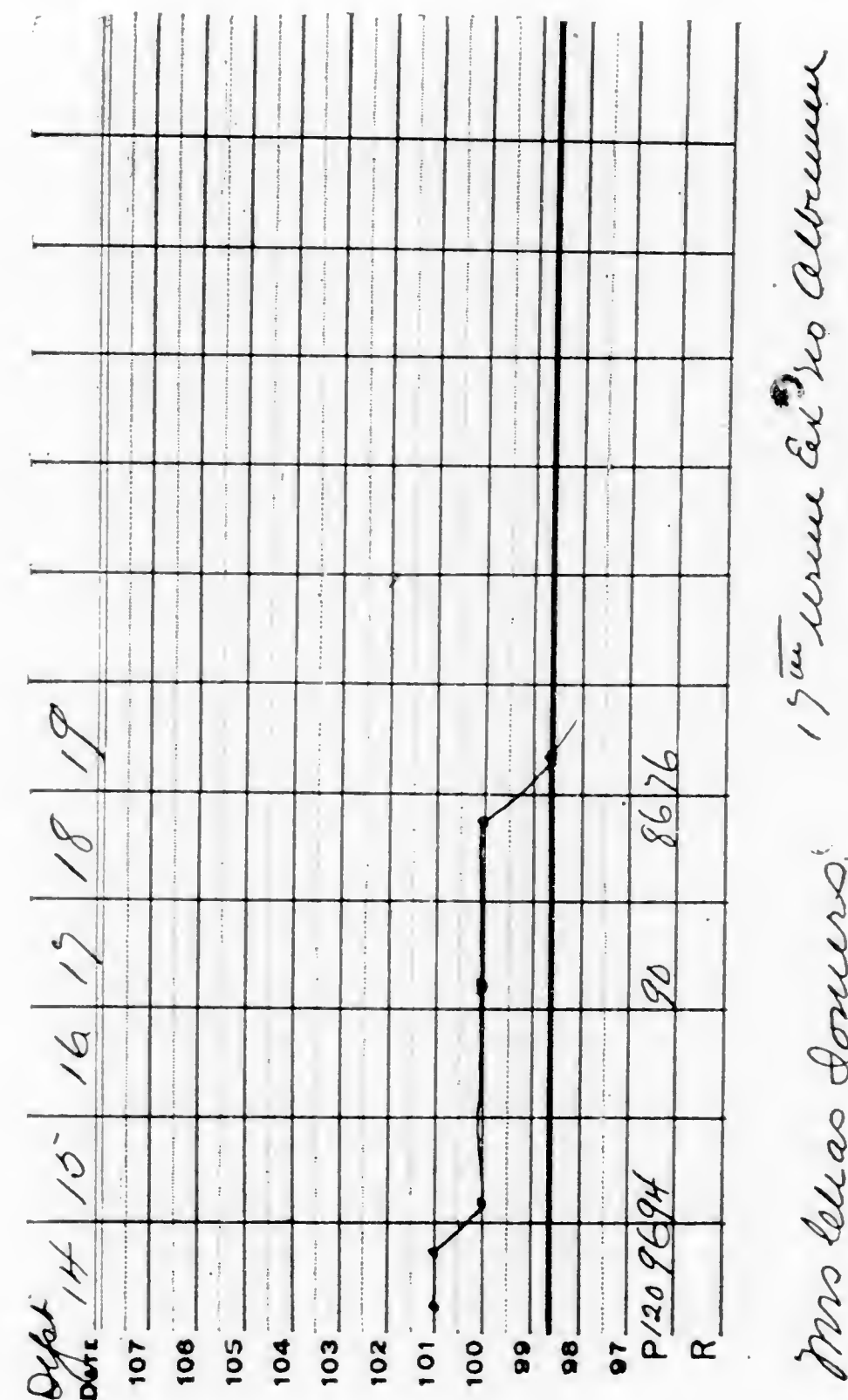


sore. Ate oatmeal, toast and coffee for breakfast; could have eaten more.

October 1.—Feels better, but sore.

October 2.—Slept very good, but thought mosquitoes worried her, but upon questioning found the itching more on the covered parts of the body. Examination of body found diagnostic rash on neck, chest and body; hands also itching.

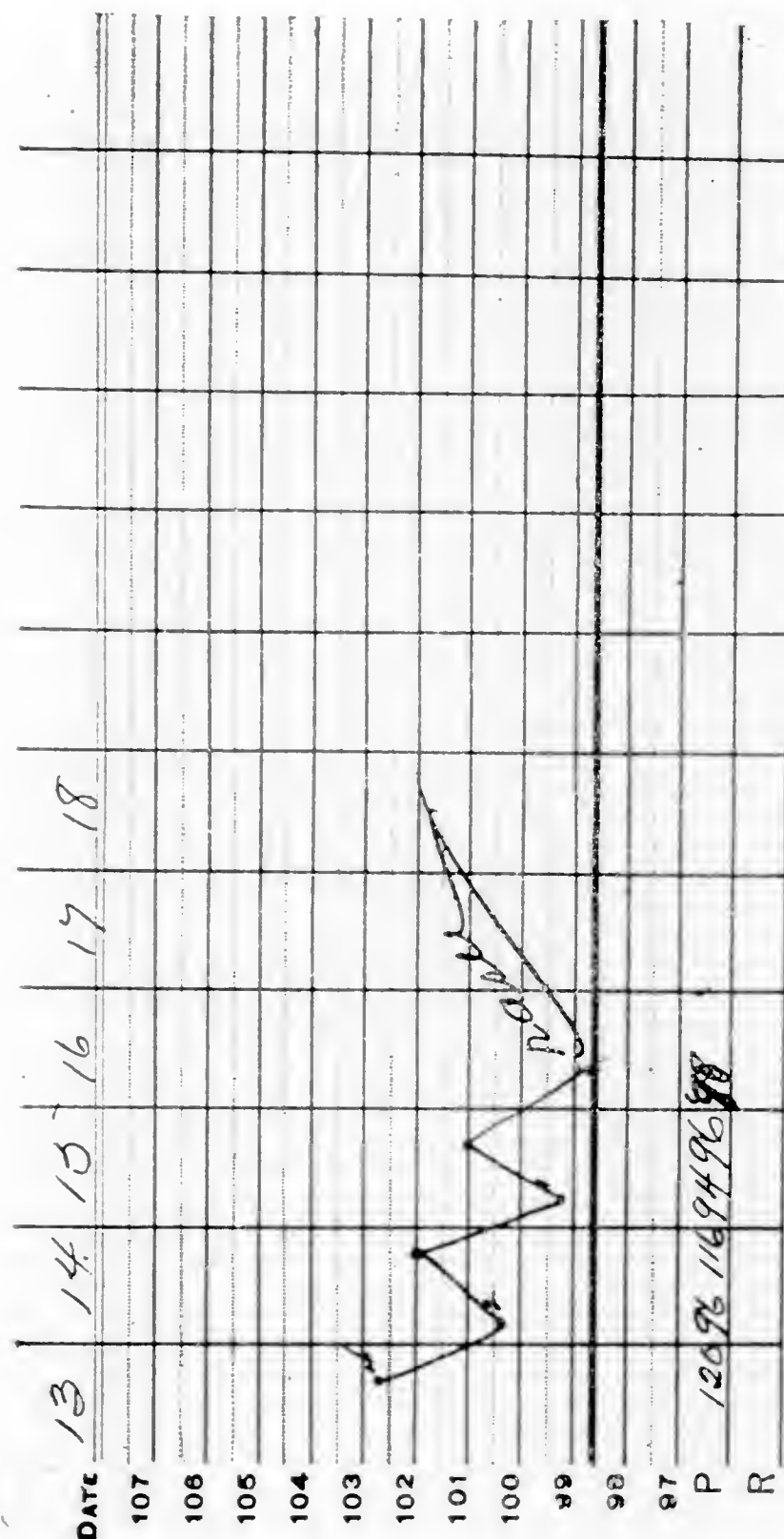
Had achy feeling about 6 p. m., 14th, and chilly sen-



sation about 8 p. m.; fever all night; great pain in head, back

and every joint; 5 p. m., 15th, head and back easy, but some pain still in limbs, particularly joints; no nausea; voiding urine every 3 to 5 hours; bowels still constipated.

Saw patient at 5 p. m.; commenced to feel bad at 10 a. m., 14th, no chill; every joint in body aching, slight rash;

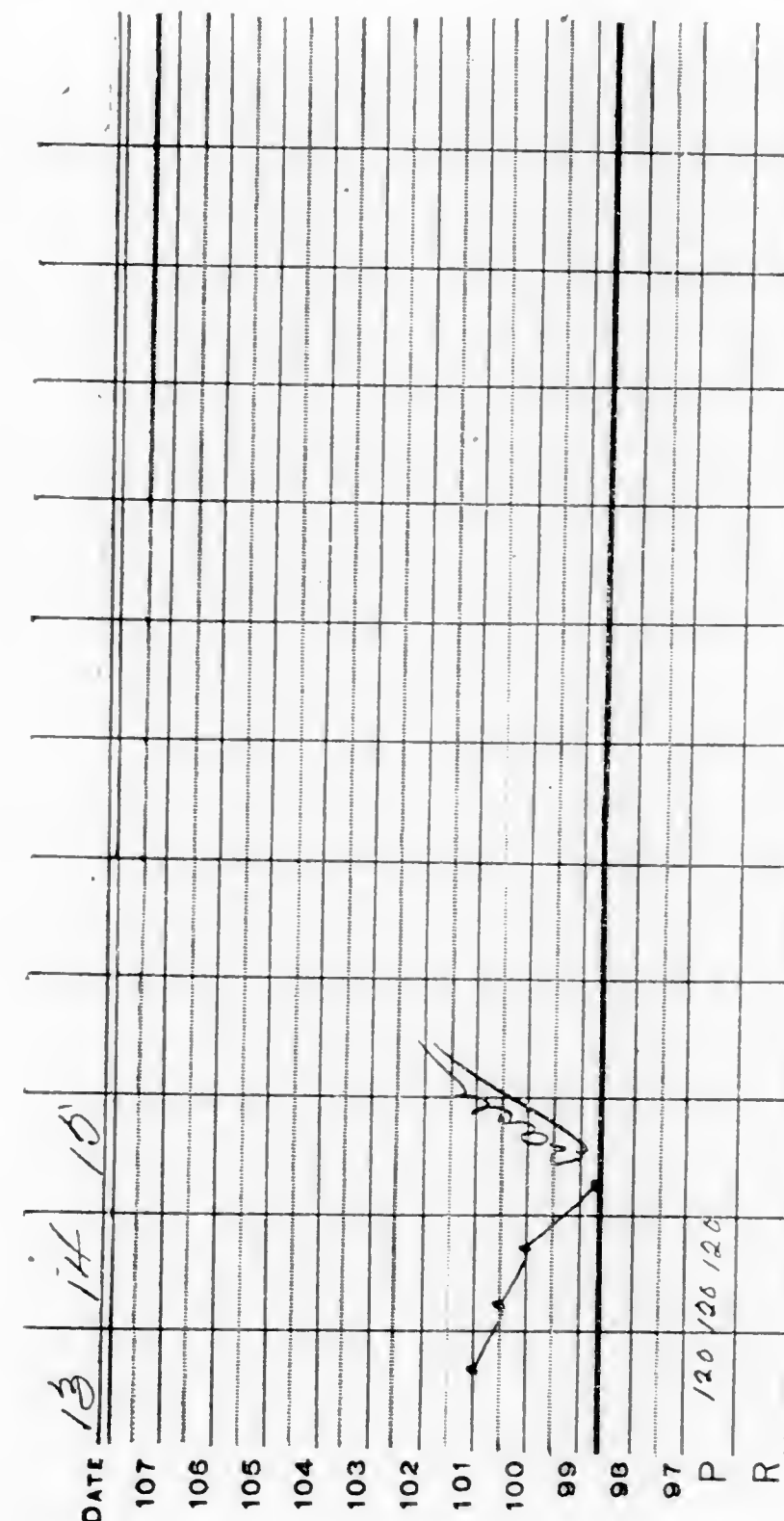


Temp 98.6
Pulse 110
13. No severe warning
14. " " " " " "
15. Pulse & Temp normal

in bed all day; urine flowing well; bowels constipated. C. &

S. 1 grain every hour till 6 given; acet. comp. given as needed; 15th, 5 p. m., bowels not acting; sulph. magnes. ordered.

Nine years old; chill 9 a. m., 13th, afterwards fever; up and around all morning till then; 5 p. m., some pain in head,

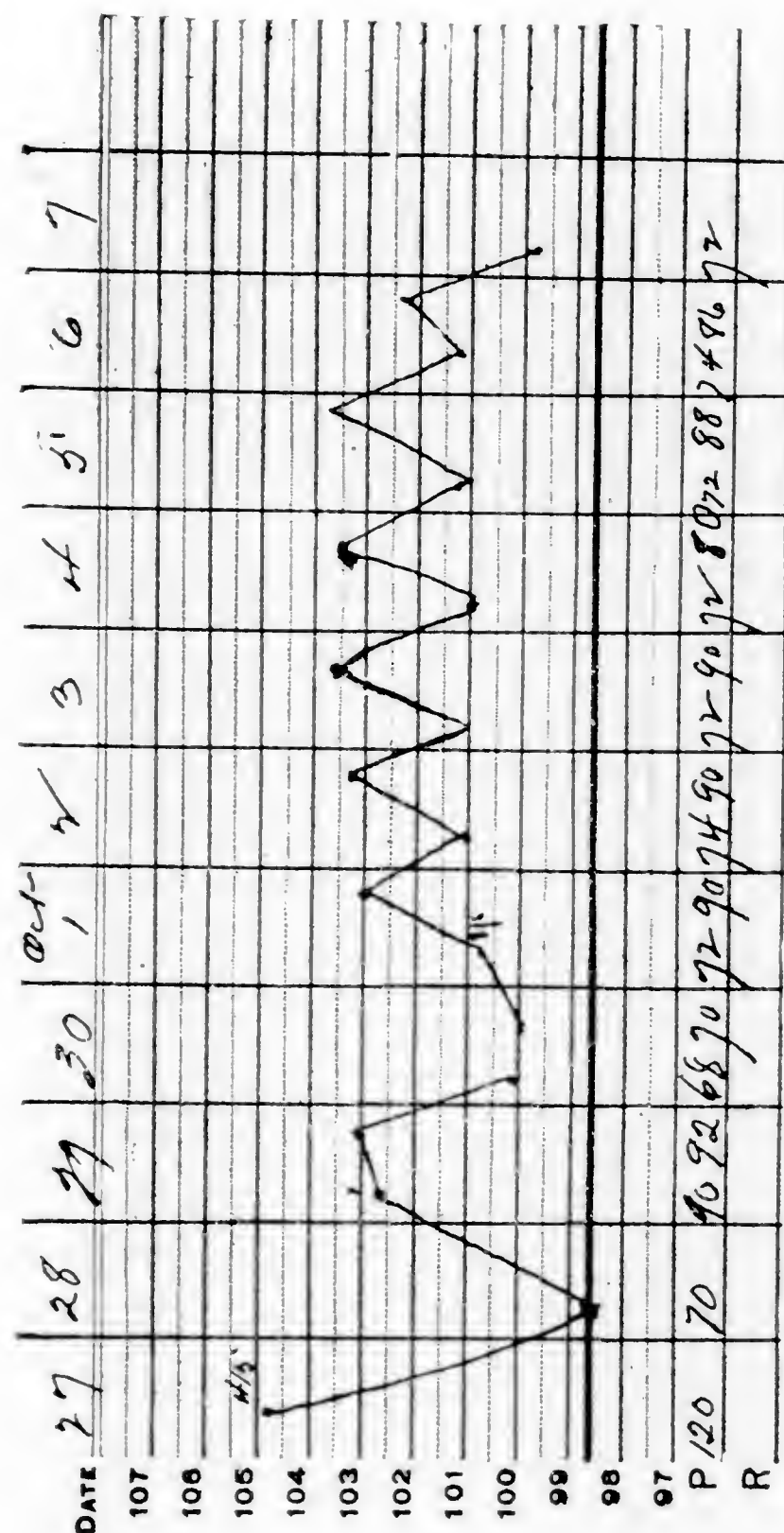


Sila Kessel... 13. No severe warning
14. " " " " " "
15. Pulse & Temp normal

back and stomach. Acetan, comp. $2\frac{1}{2}$ grains every 2 hours, or as needed. 15th, 8 a. m., Cal. & Soda 1 grain each every hour,

followed by saline at 5 p. m.; also, quinine ordered on the 15th at 6 a. m., 10 grains. 15th, 8 a. m., temperature and pulse normal; herpetic eruption on lips.

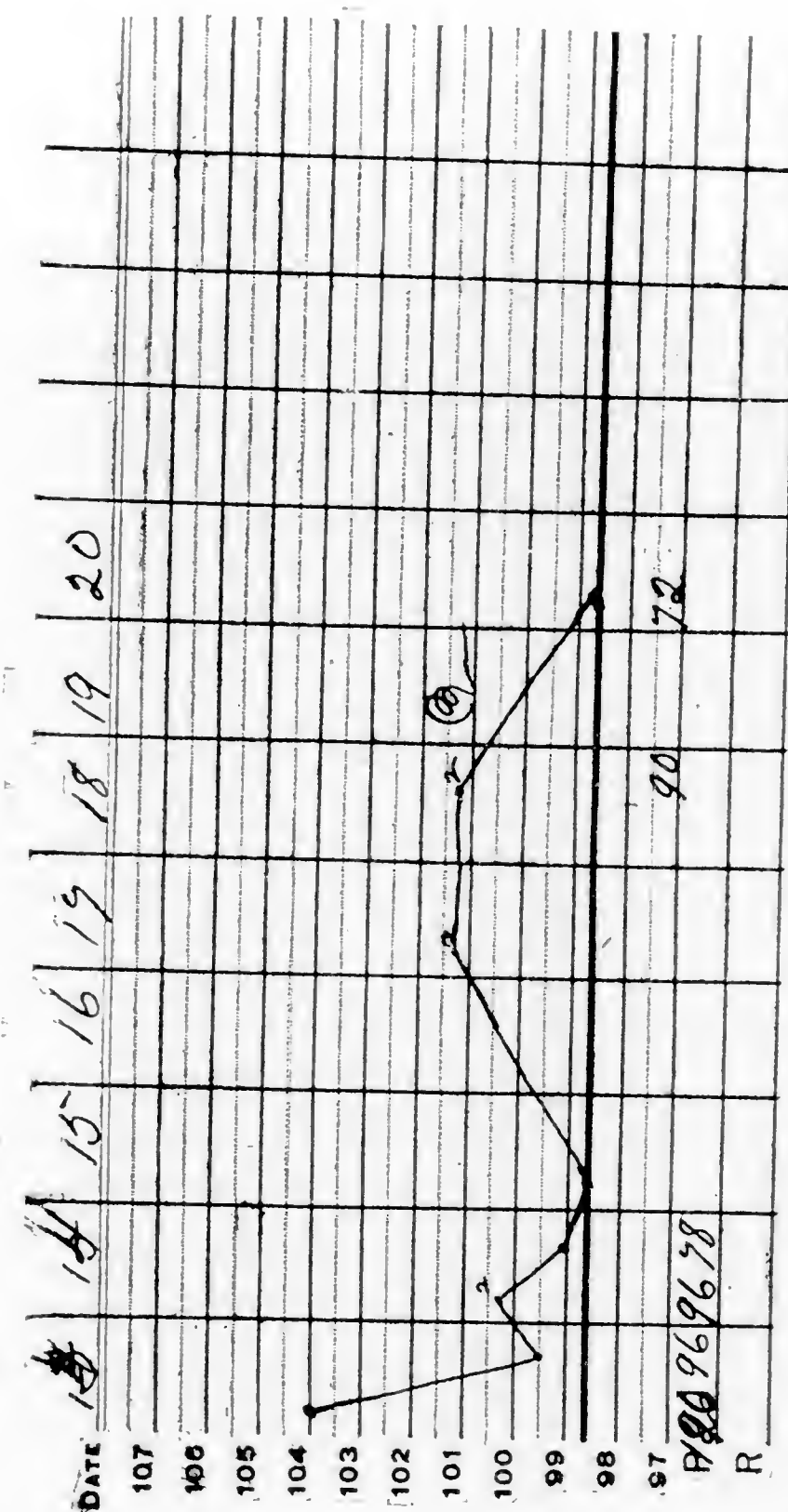
Arrived in Miami Sept. 20th, from Alabama. Headache,



aching all over; vomited some.

27 no albumen
28 " "
29 " "
30 " "

Commenced vomiting bile at 8 a. m., 14th; called at once. C. & S. given; acted 6 times 5 p. m. Acetan. comp. given as

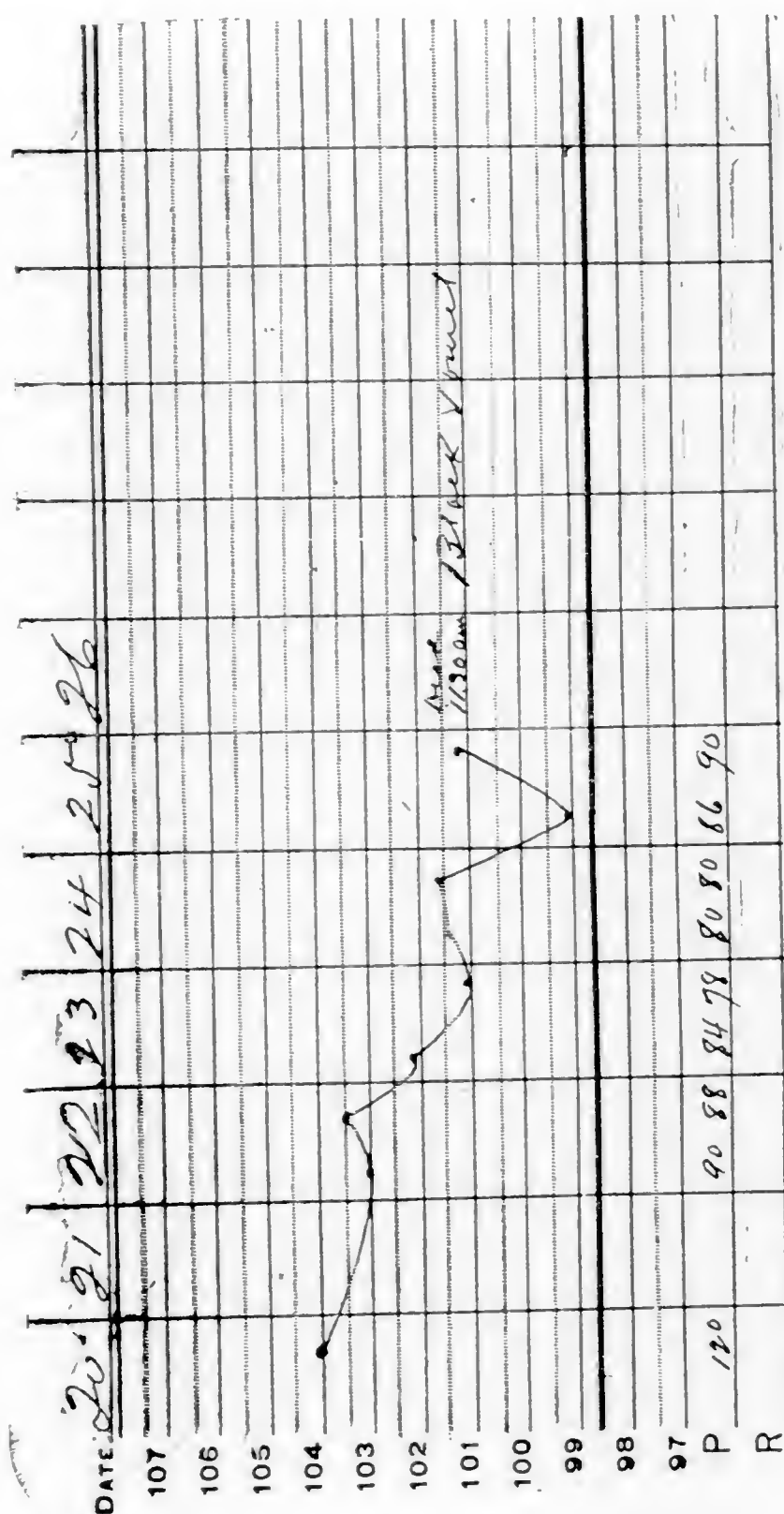


needed. Sitting up most of time after 5 p. m., 14th; eating soups, broths, etc.

Hargrove Hotel, Miami.—Had chill about 2 a. m., 20th, fever following; complained of great pain in head and back,

no urine excreted
Sept 19
Hargrove
E. J.

knees and legs. Patient seemed reticent regarding my visit, saying he would send for me should my services be needed again; did not see him again till morning of 22d, when I dropped in to see how he was getting along. He had taken



Urine examined 10 P.M. Oct 22.
for first time. Contained
about 20% albumen, per Vol.

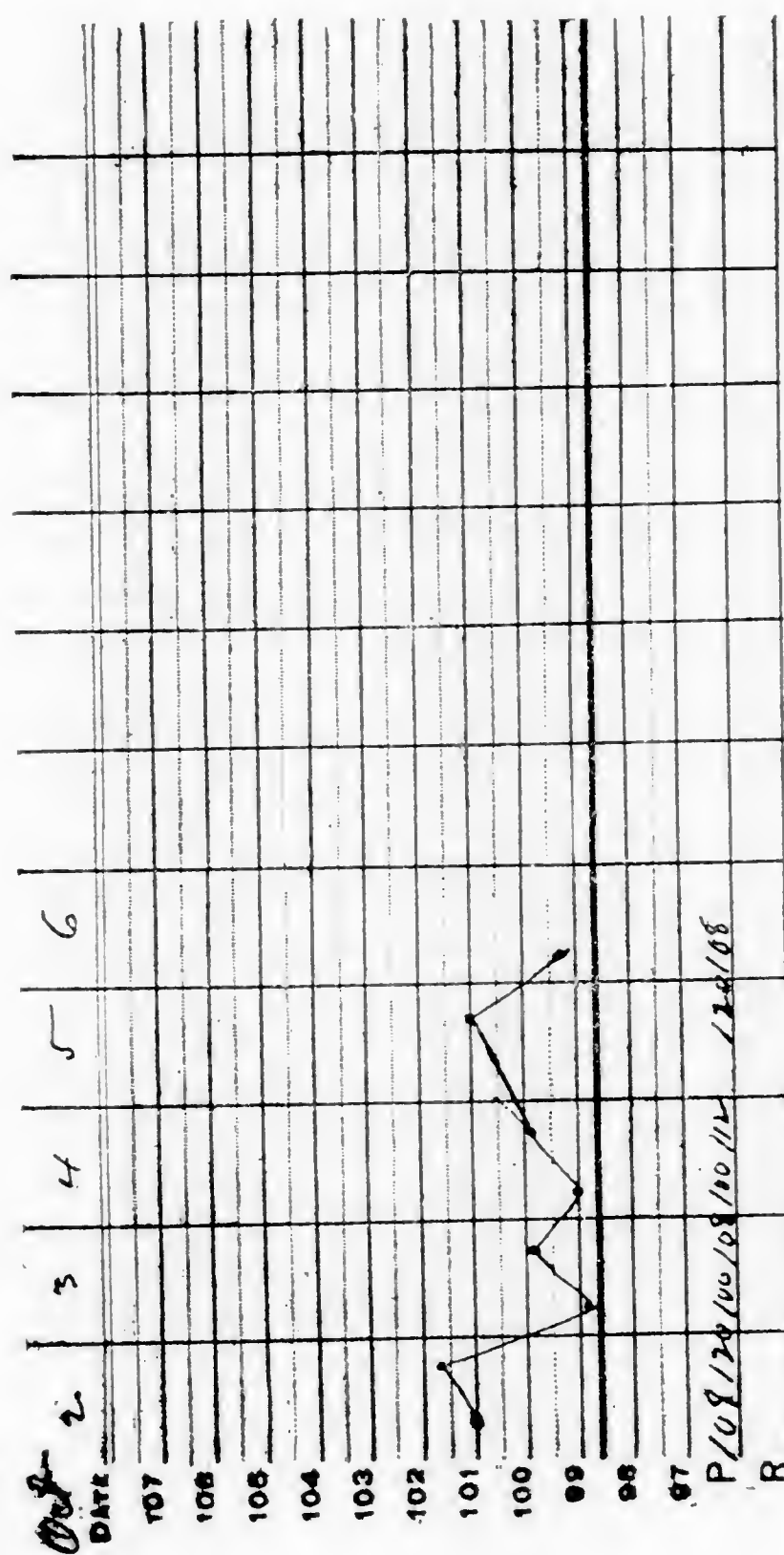
J. P. Hargrove
States Maine.

but little medicine; found bowels constipated; all pain gone but headache; ordered Sal Rochelle; made several attempts to get urine, but did not do so until night of 22d, then found

it contained albumen. Placed nurse in charge and isolated case. Dr. Horsey saw patient at 11 p. m., 23d; placed hotel under guard. On 24th, patient had suppression of urine, coma at night, and black vomit on morning 25th. Died 11:30 a. m. 25th.

CLINICAL HISTORY.

October 2.—Taken with fever, pain in head and legs;



Ex Urine, 2 - 2w albumen
" " 3 " "
" " 4 " "
" " 5 " "

Mrs. D. H. Anderson.

every bone aching and still ache this morning, especially feet and knees; eyes sore when I look around.

October 3.—Feel sore all over, skin moist and cool; ate a very good breakfast.

P. M.—Ate dinner and have been sitting around the room most of the day.

October 4.—Slept fairly well last night; the rheumatism in knees hurt me worse.

P. M.—Have been up and sitting around all day.

October 5.—Felt chilly last night for the want of cover; had a little fever afterward; feel better now, but feel sore, and my skin itches.

October 6.—Ate breakfast and sitting up; itchings getting worse; slight rash appearing on neck and chest.

CLINICAL HISTORY.

Felt unwell yesterday, October 1; started with diarrhoea; began yawning about 8:30 p. m.; continued until sweat began; had no chill.

October 2.—Face not flushed; slight flush, "hectic," over right cheek; has soreness of muscles of eyes, like "la grippe;" has soreness of forehead; thinks due to headache of last night; pain in back, none in knees or legs; eyes red; urine shows albumen first day.

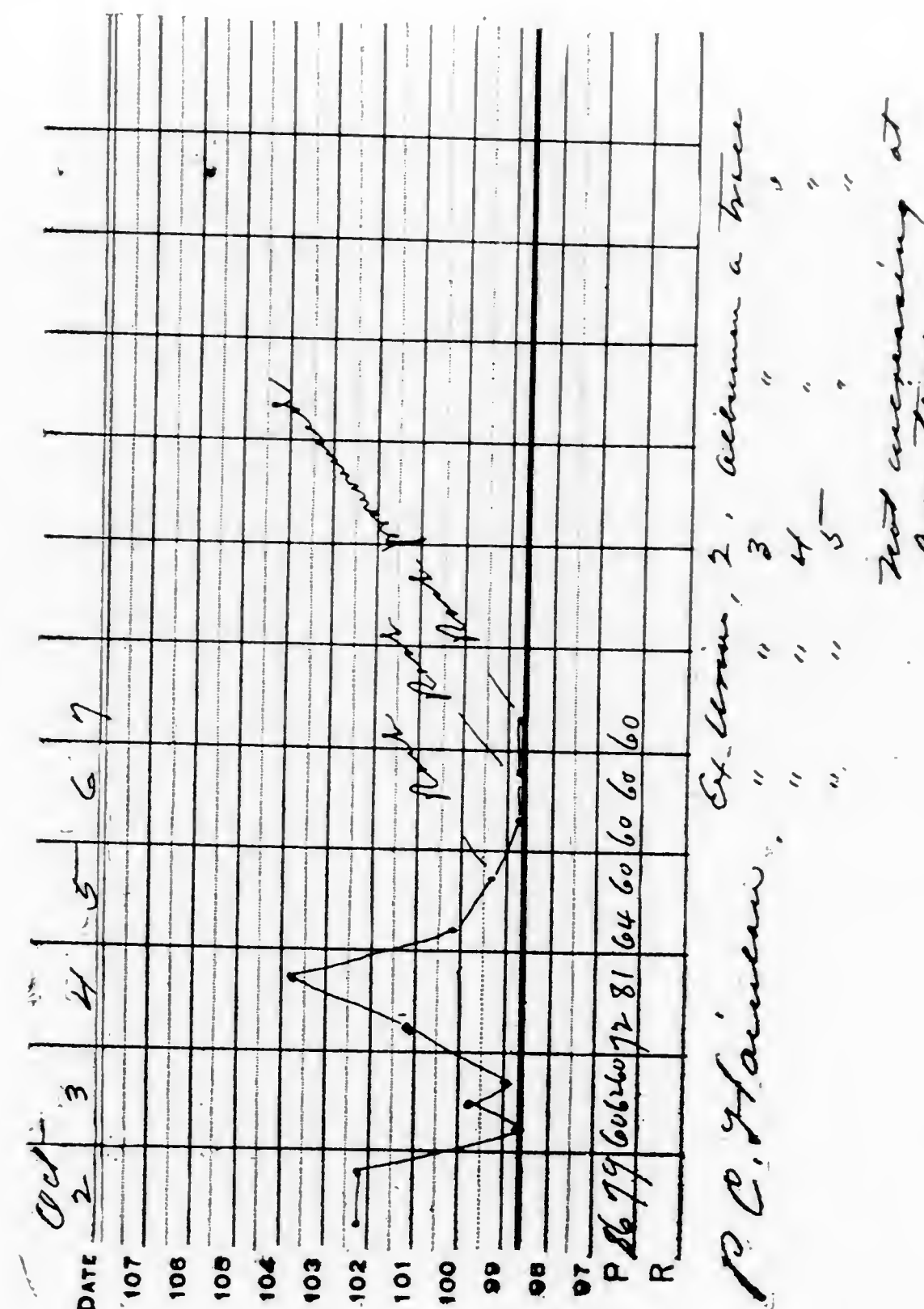
P. M.—Kidneys acting well; feels better.

October 4.—Patient dressed; sitting up; feels better. Temp., 101; had taken nourishment.

P. M.—In bed, feels bad again; temp. 103 4-5; pains have returned.

October 5.—Temp. 100 1-5; feels better; rash appearing on neck and chest.

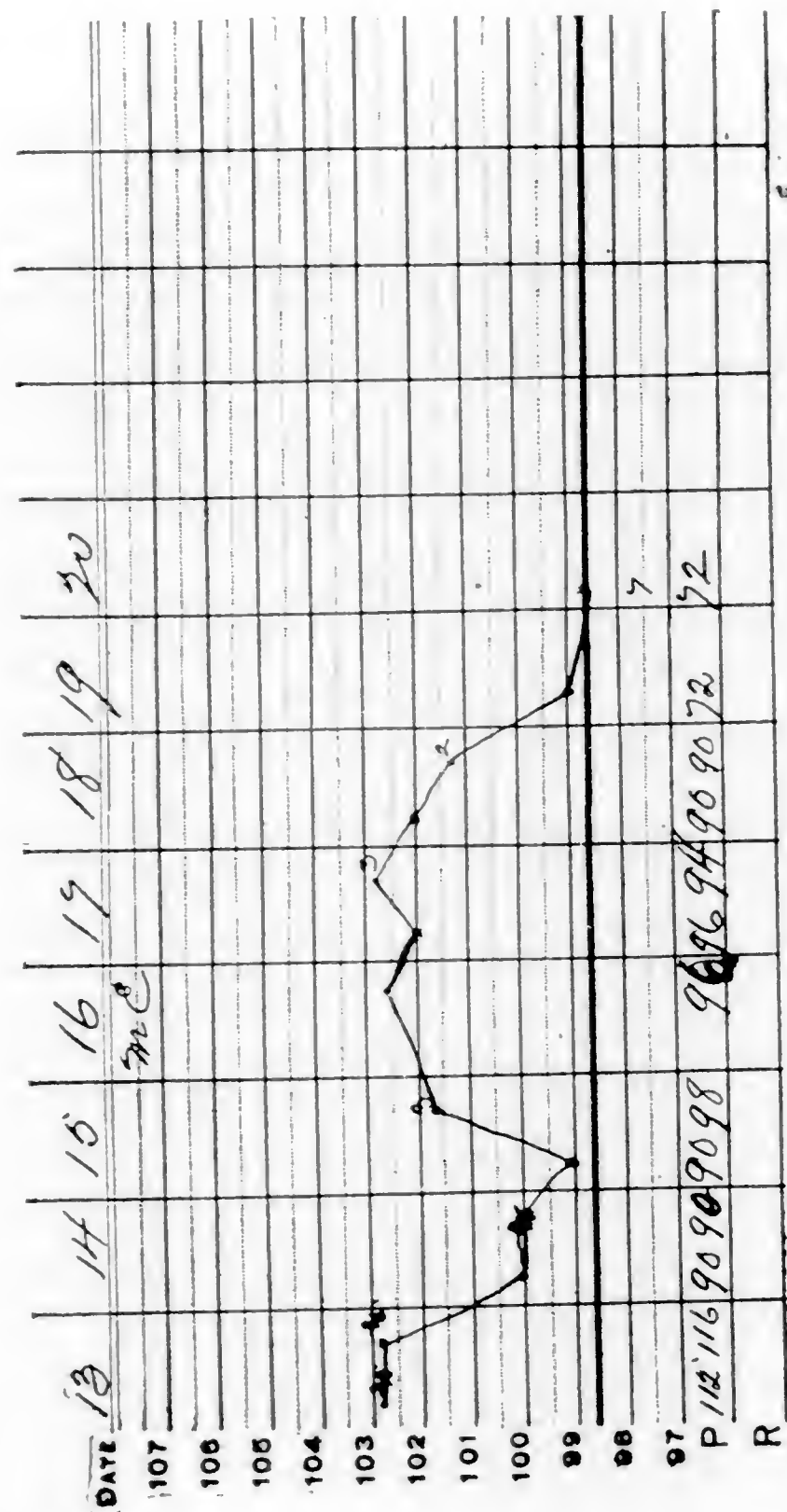
October 6.—Temp. 99½; rash more pronounced; feels quite well, but tired.



Complained 14th, at 7 a. m., of being sick from loss of sleep and went to bed. Got up during afternoon and has been up and down since this 15th, 7 p. m.

Treatment: C. & S. one grain each, every hour; acetan-

elid comp. $2\frac{1}{2}$ grains continued till bowels acted well, then C. & S. stopped; acet. continued as needed; 15th, up most all time, eating milk, etc.

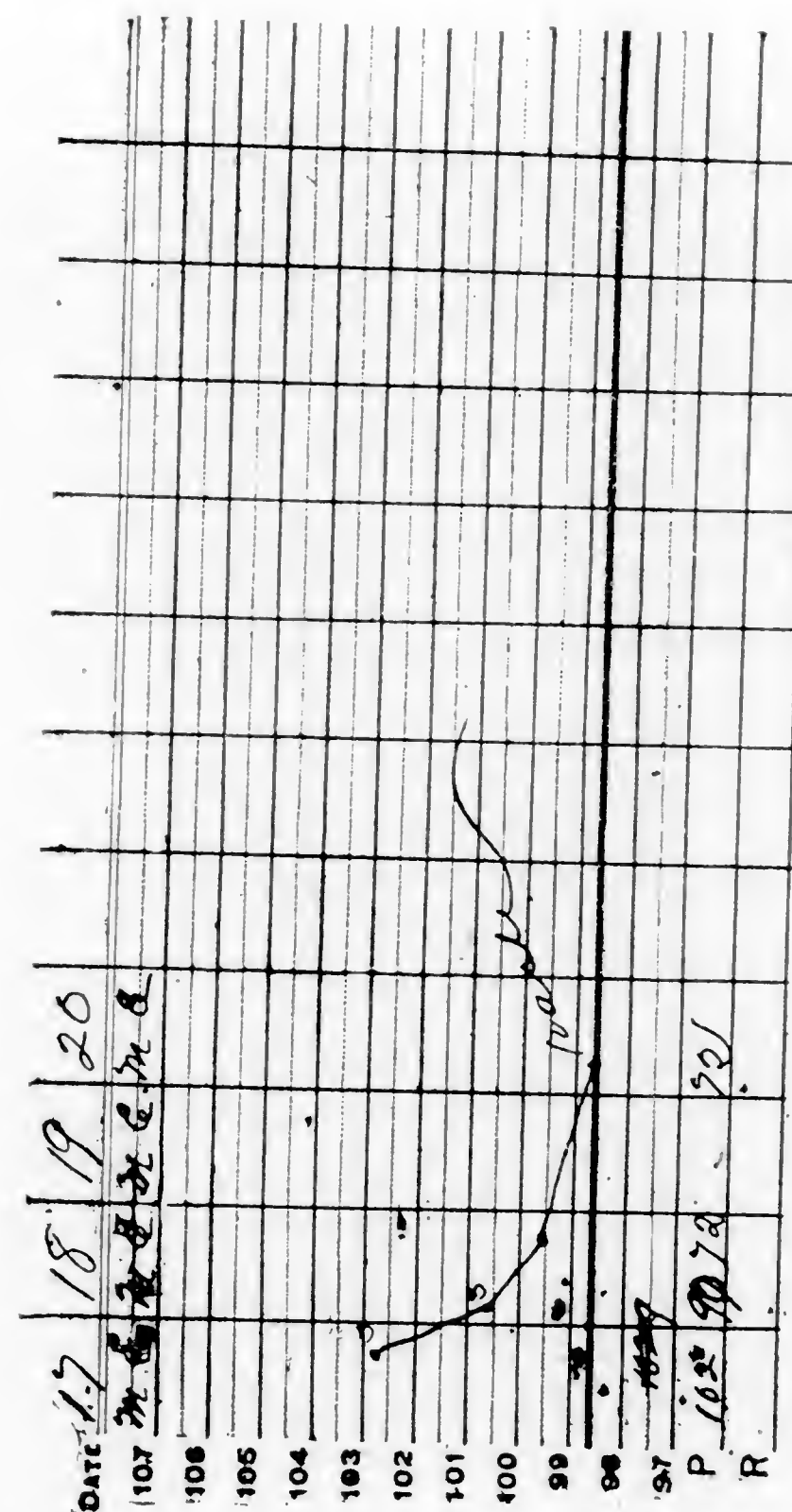


Johnnie Harvey. no urine warm enough to 14 ²²99
Urine examing 500 albumen

Taken 3 p. m.; no chill; fever, headache, backache; prin-

Treatment: Calomel and opium.

Treatment: Cal. and sod. 1 grain every hour till 4 taken;
acet. comp. as needed.

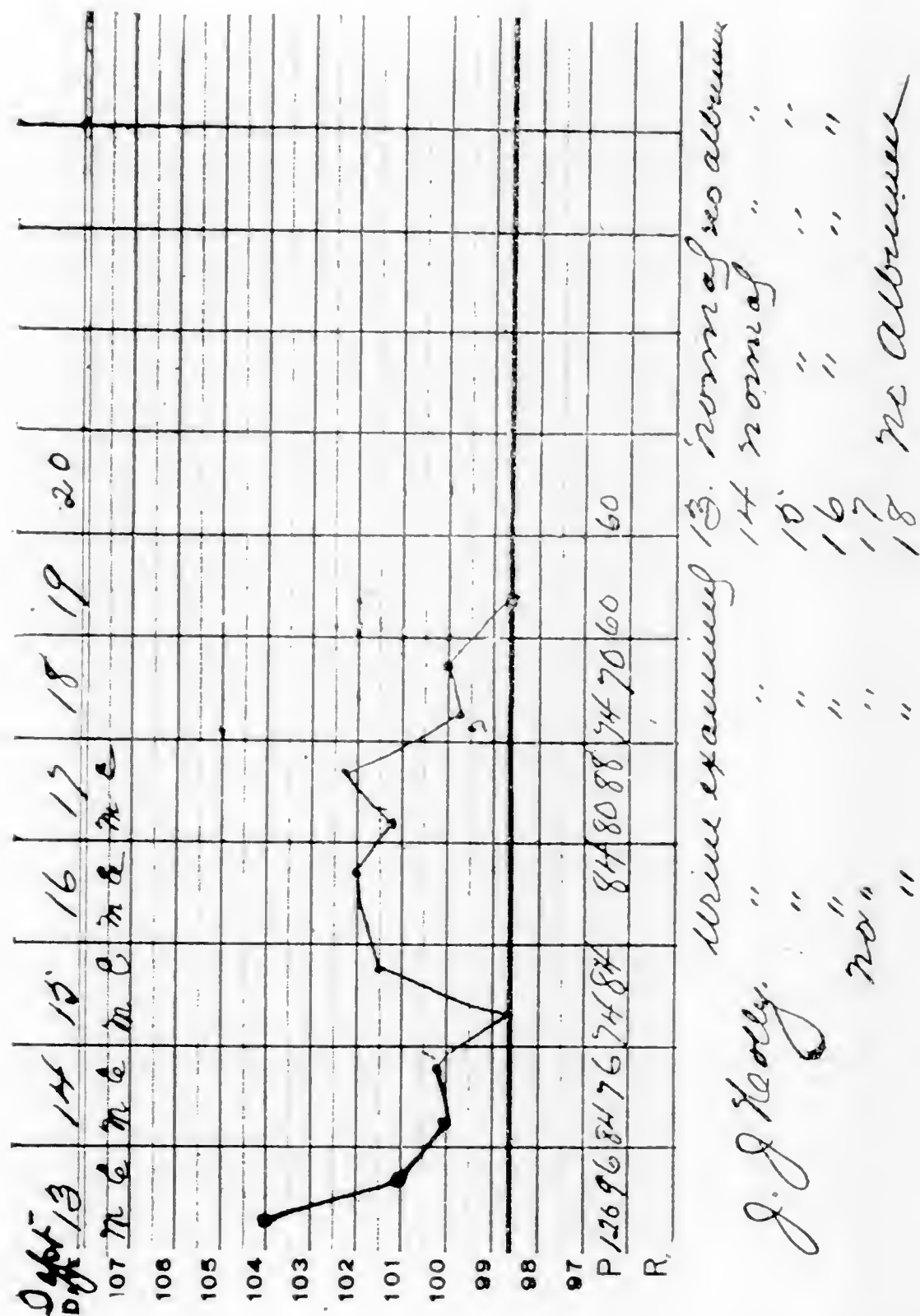


Grand Prairie
Age 2' -
25 ft. of Avenue D
20 in. lime ex no. album

Taken 8 p. m., 13th; no chill, no vomiting; fever rose 12

10 B of H

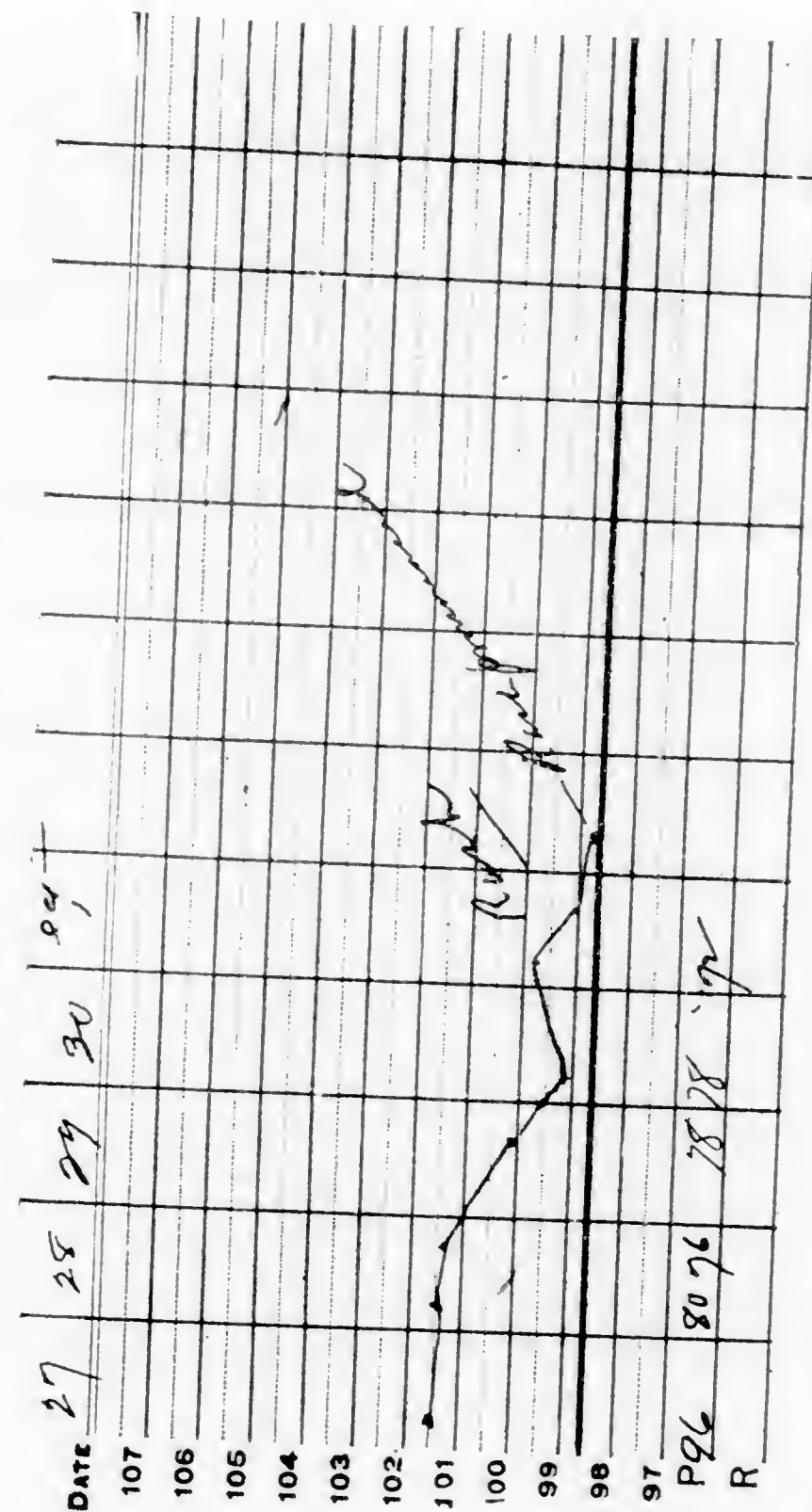
and intense aching in every joint, back and head; bowels constipated; passed urine 3 times during night. Cal. and sod. 1 grain each every hour; acetanilid comp. 5 grains every 2 hours, or as needed. Began to improve, less pains; rested well night 14th; feels weak on 15th, a. m.; no appetite up to 12 m., when milk toast and soft boiled eggs were eaten, and at



5:30 complained of hunger; milk ordered during night

Condition gone along about the same; night of 17th, 6 p. m., quite restless and complains of some nausea; a very nervous patient.

Mrs. Girtman.—Taken sick about 7 p. m., aching,



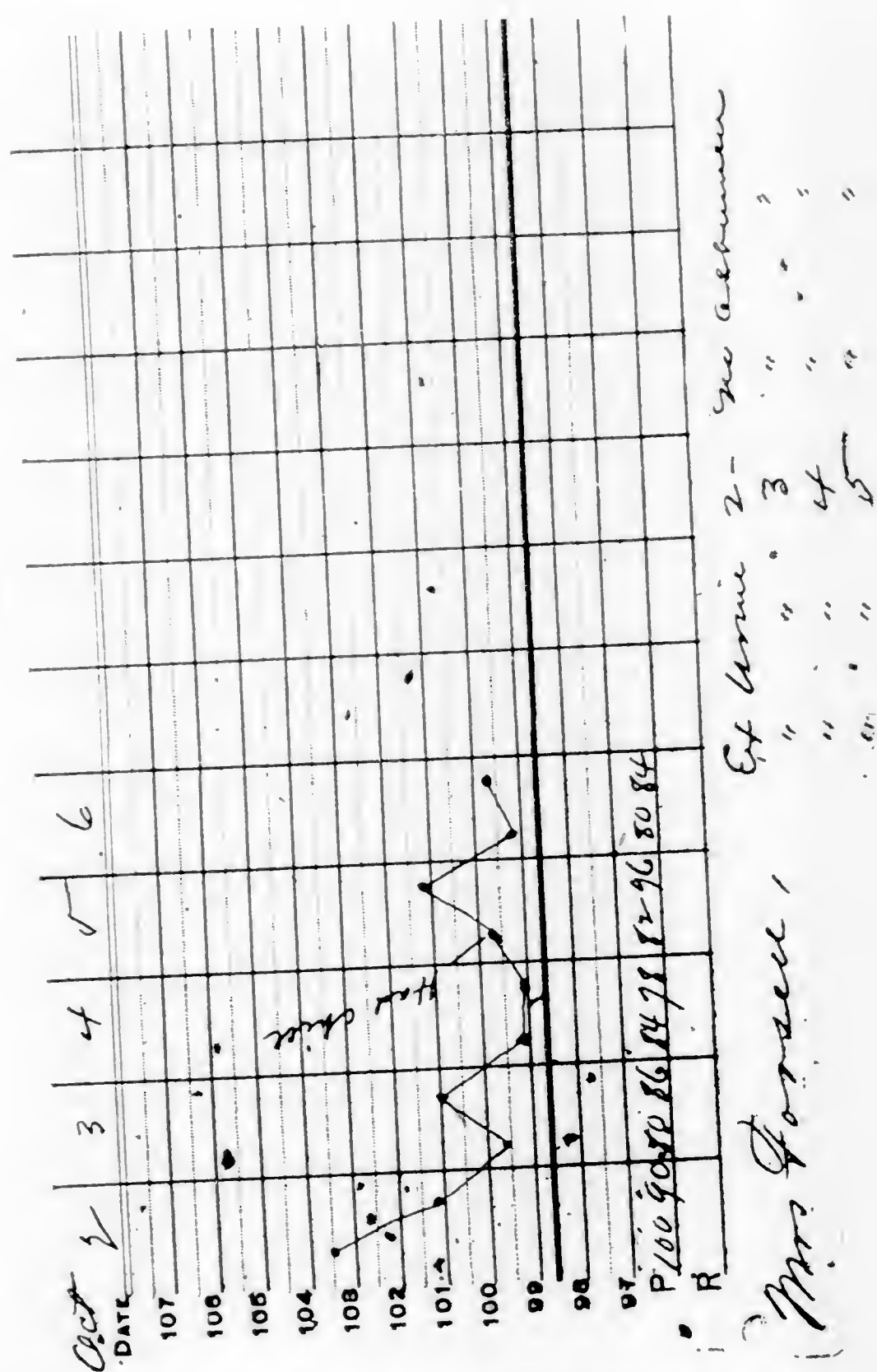
Mrs. Girtman

stretching, backache, headache, comes and goes; easy now;

bowels constipated. Four members of family have had dengue, with beautiful rash.

CLINICAL HISTORY.

Awoke about 4 o'clock in the morning feeling bad; no



chill; got up and cooked breakfast; drank a cup of coffee;

then went to bed with pains in every bone of body, even my fingers and toes ache, especially the joints.

P. M.—Not quite so much pain, but yet some pain in fingers and arms; tongue large and brownish coating.

October 3.—Slept fairly well last night, but have some pain yet; urine plenty, bowels acting well.

P. M.—Hungry; asked for piece of beefsteak.

October 4.—Did not rest quite so well as night before. I found patient sitting up in chair.

P. M.—Has earache; has pains in arms and fingers yet; not weak or sick.

October 5.—Feels sore in every limb; had chill at noon; pains all return.

P. M.—Slight herpes on lips.

CLINICAL HISTORY.

October 1.—Feeling bad for two days; took fever September 30, 5 p. m., no chill; slept during night, but had pain in head, back and knees; tongue coated, skin moist and cool.

October 2.—Slept very well; skin moist and cool; still aches.

P. M.—Had very comfortable day.

October 3.—Slept fairly well, but said bowels had not acted that day; had eaten some breakfast.

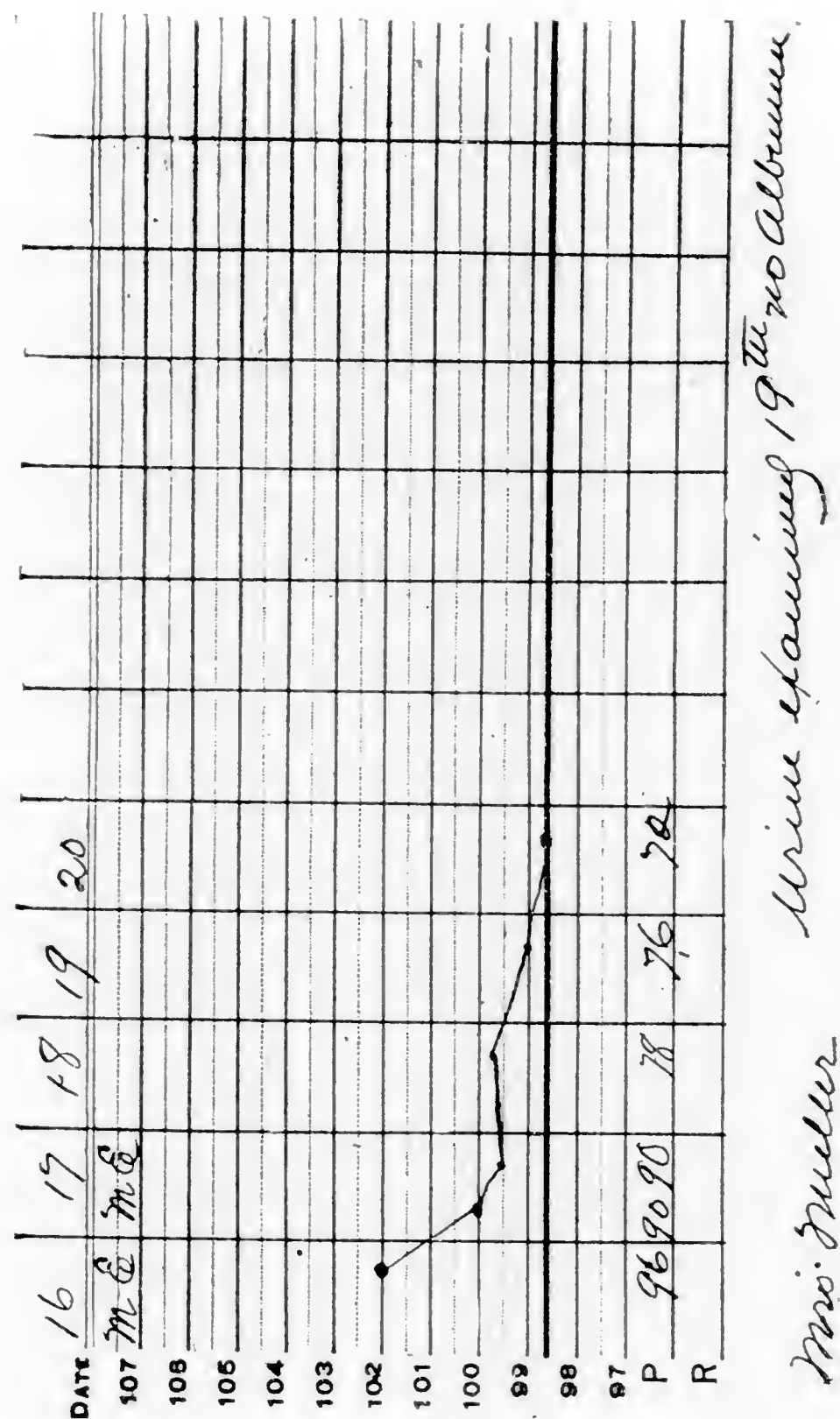
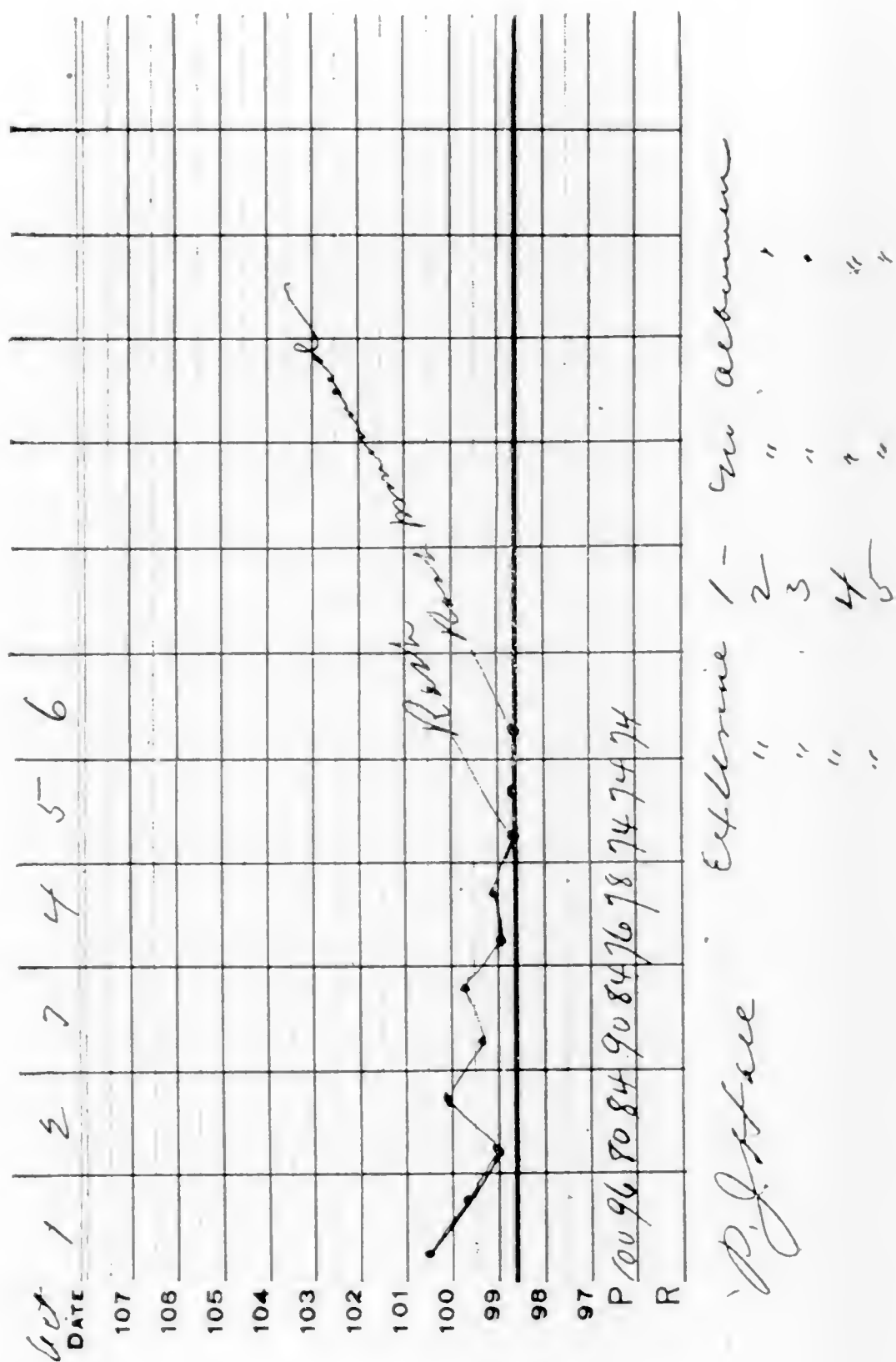
P. M.—Feels very well; has some pain in back and knees; skin and palms of hands itch.

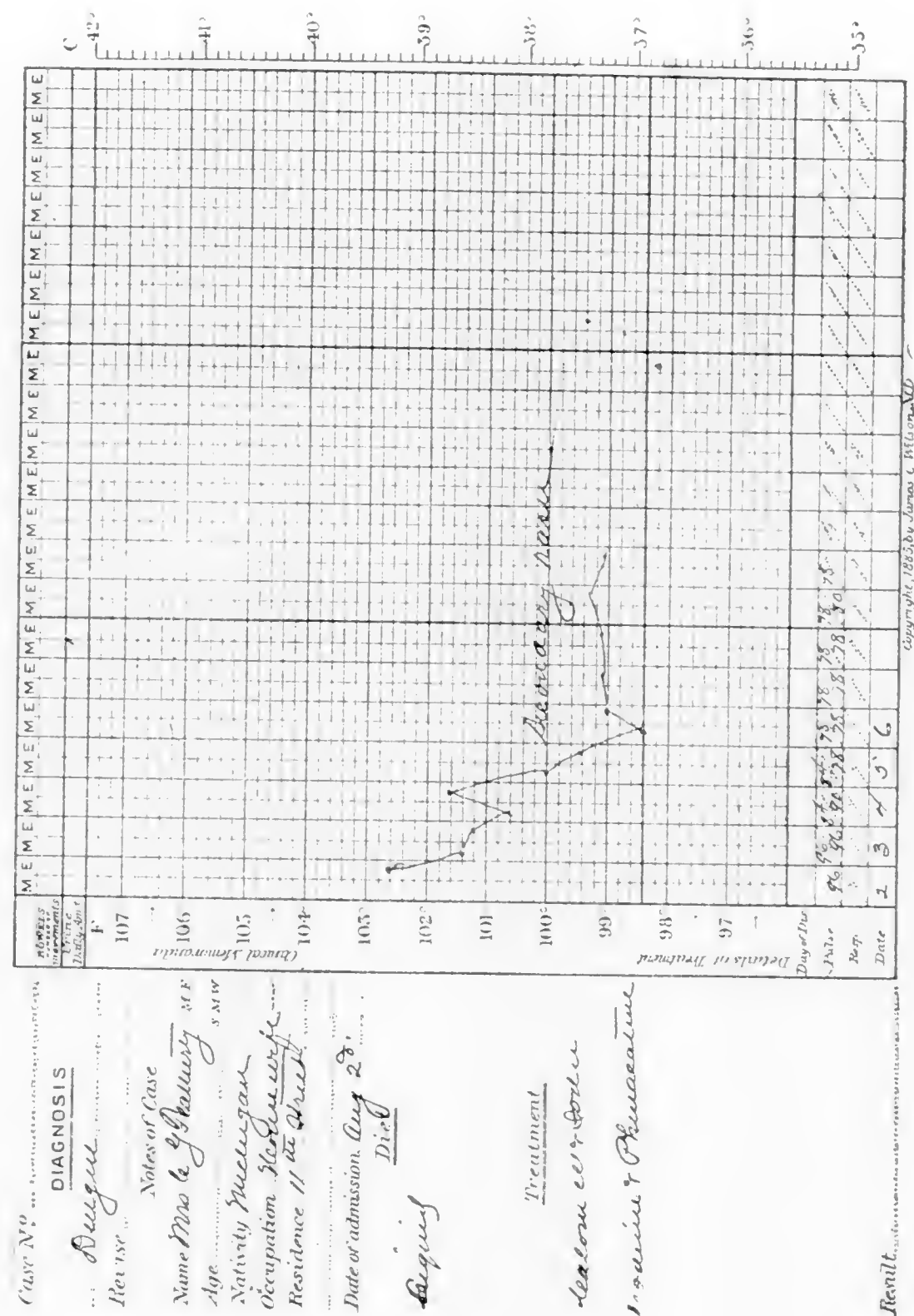
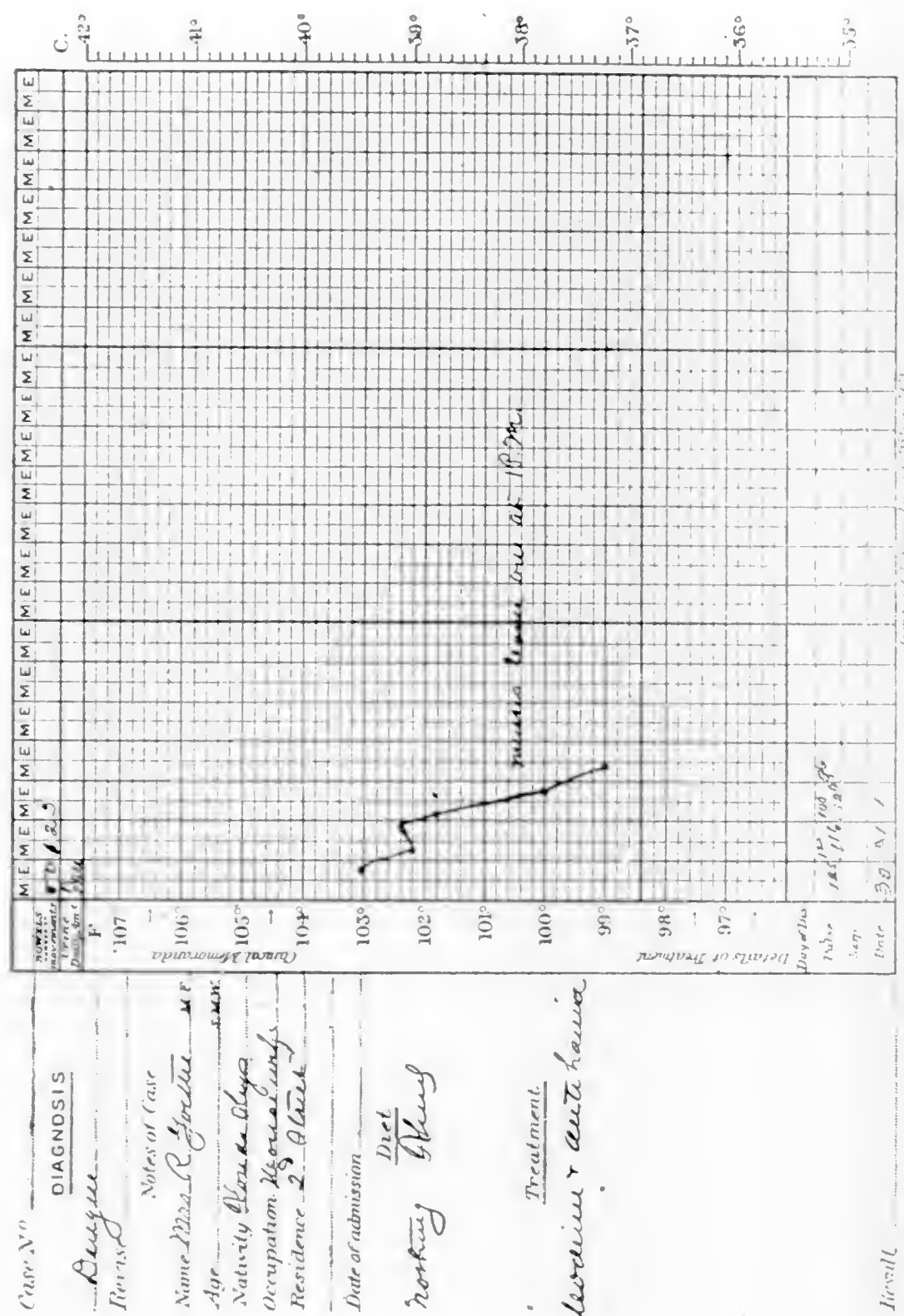
October 4.—Ate a good supper last night; no pain, only general soreness.

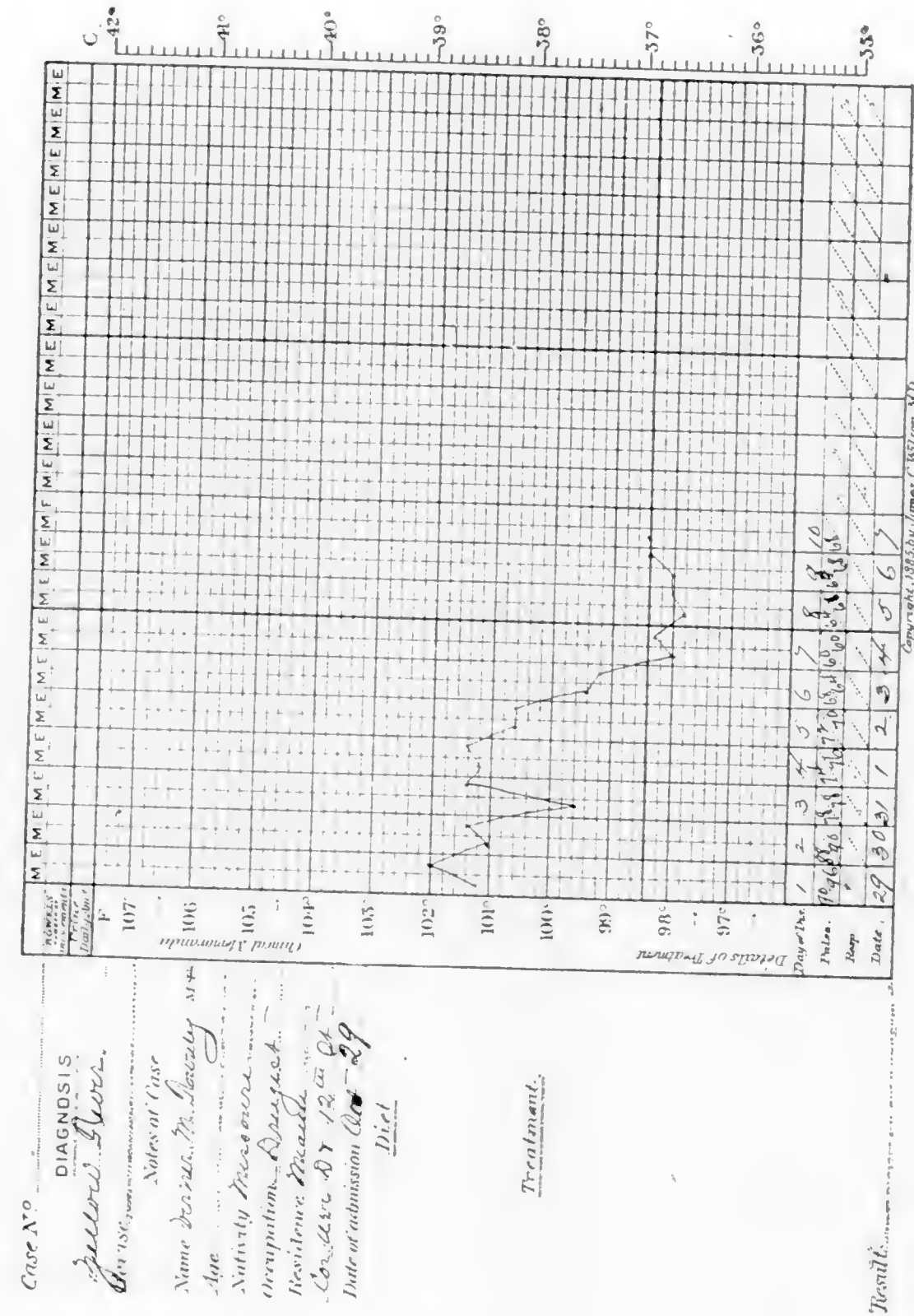
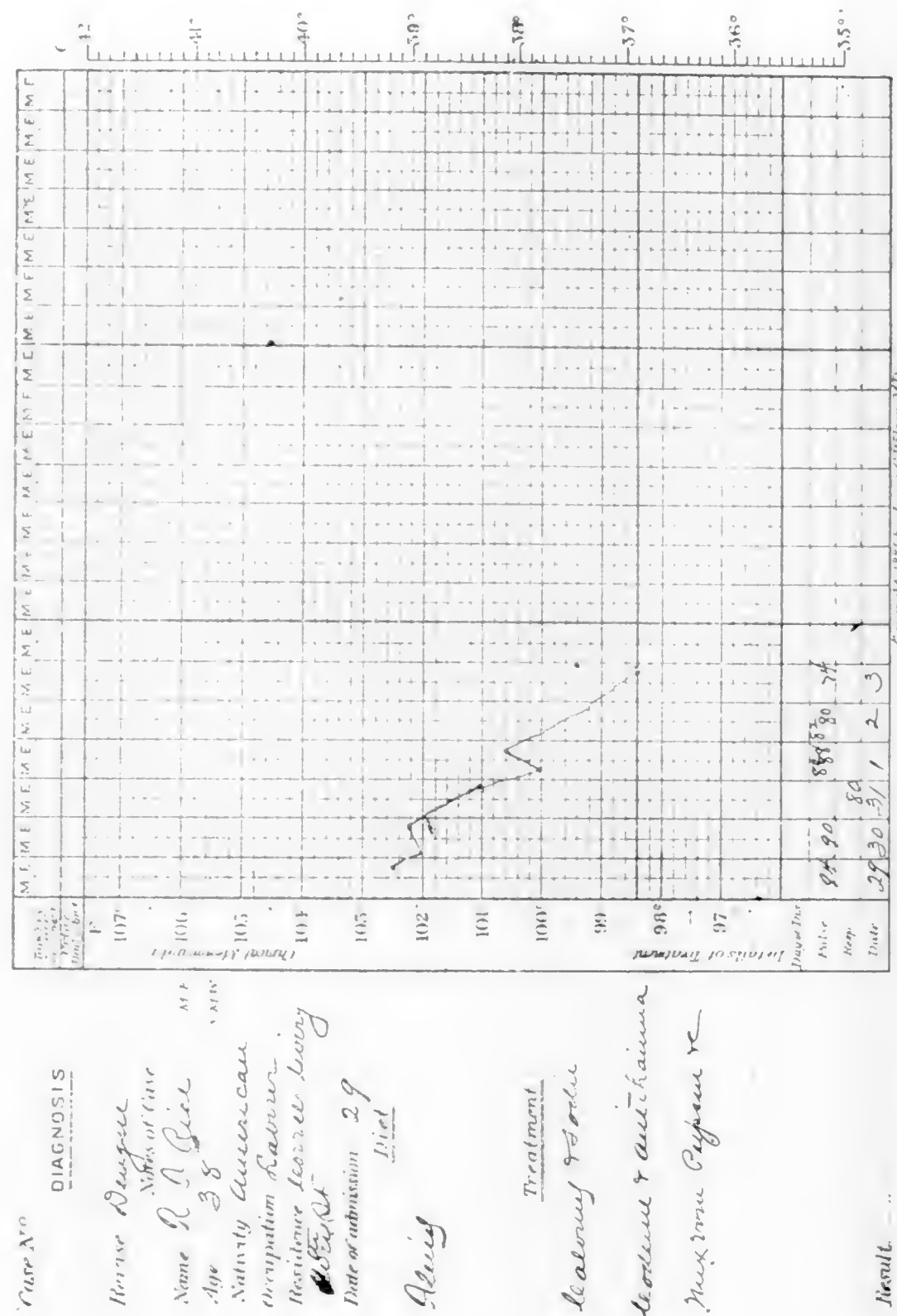
P. M.—Up and dressed.

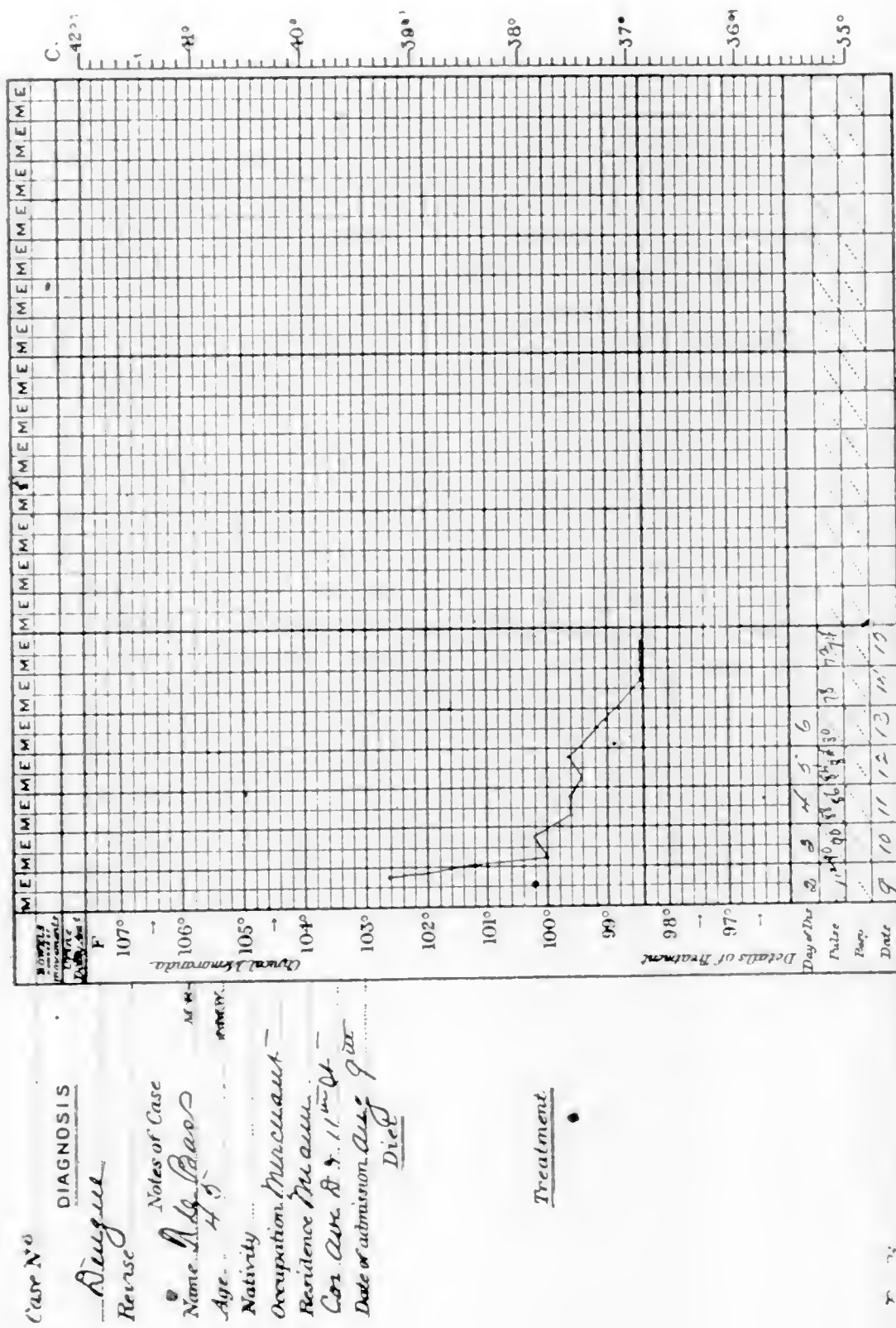
October 5.—Up and dressed; walked down town and got a shave; has rash.

October 6.—Up and dressed: has rash on face, neck, chest and palms of hands, very pronounced. "Discharged."

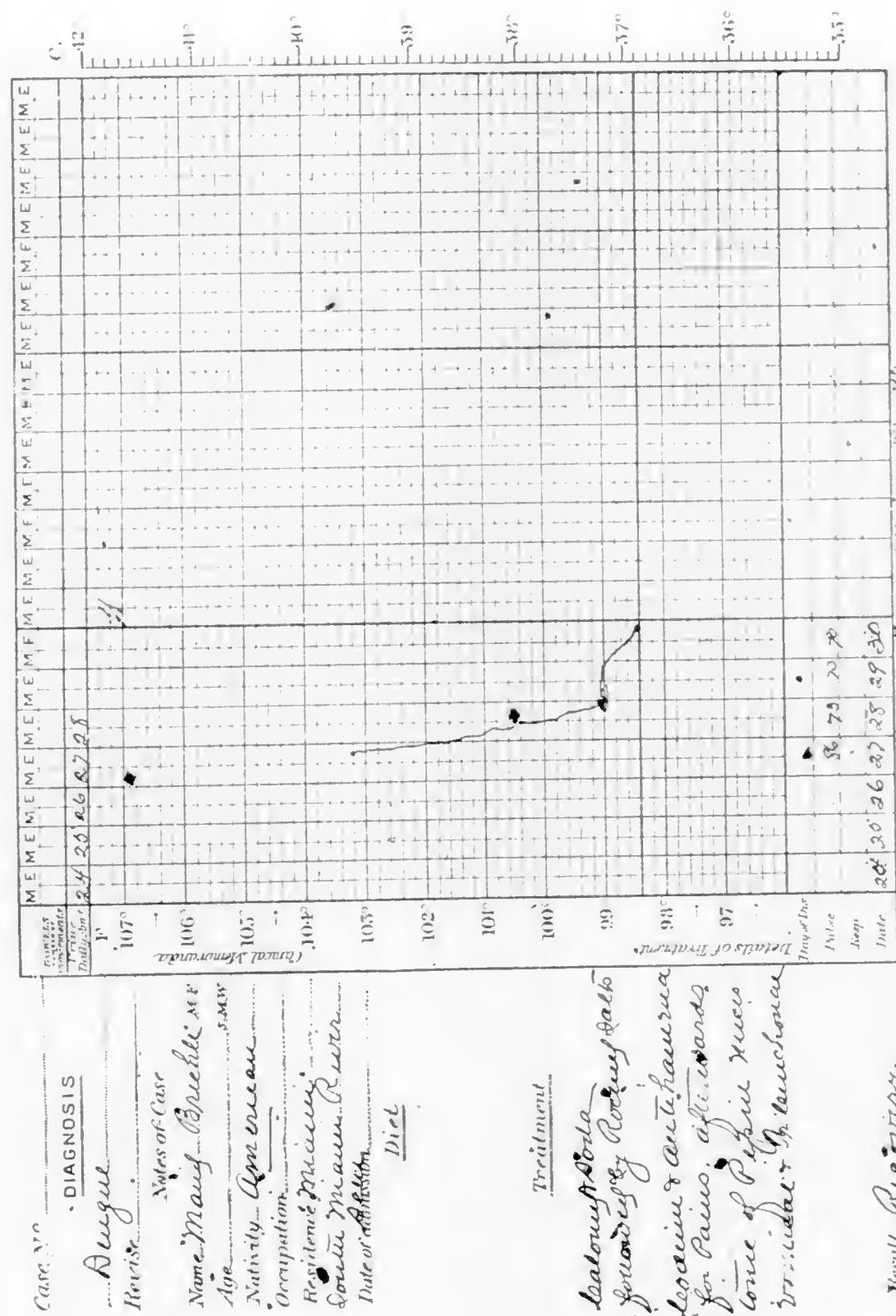




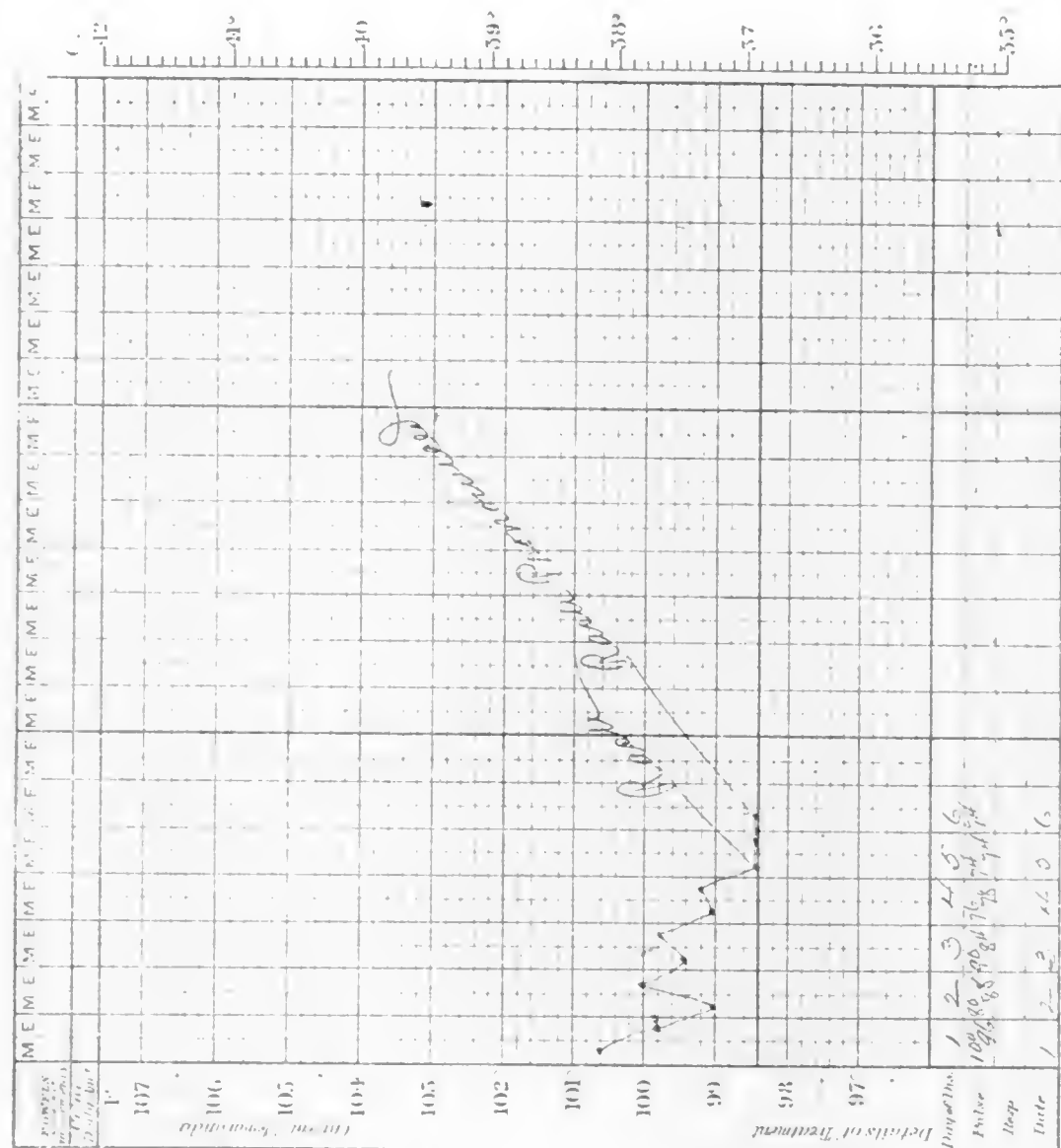




No Abnormal at any time



No Abnormal at any time

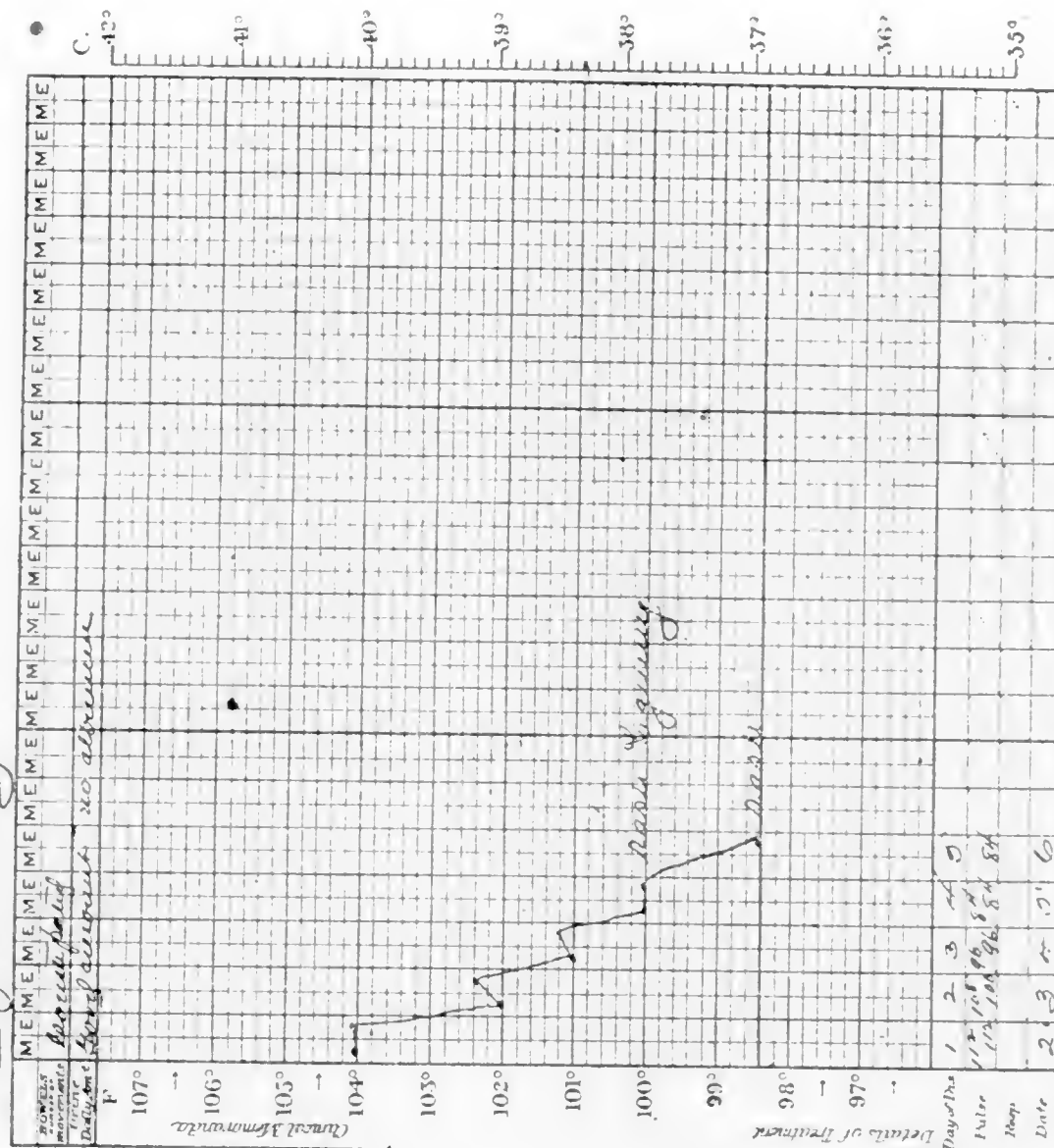


Dr. J. H. H. H.

Case No. 100
 Name J. H. H.
 Age 30
 Sex M
 Occupation Teacher
 Residence Chicago
 Date of admission Oct 1
 Diet ...

Treatment

Result Recovery

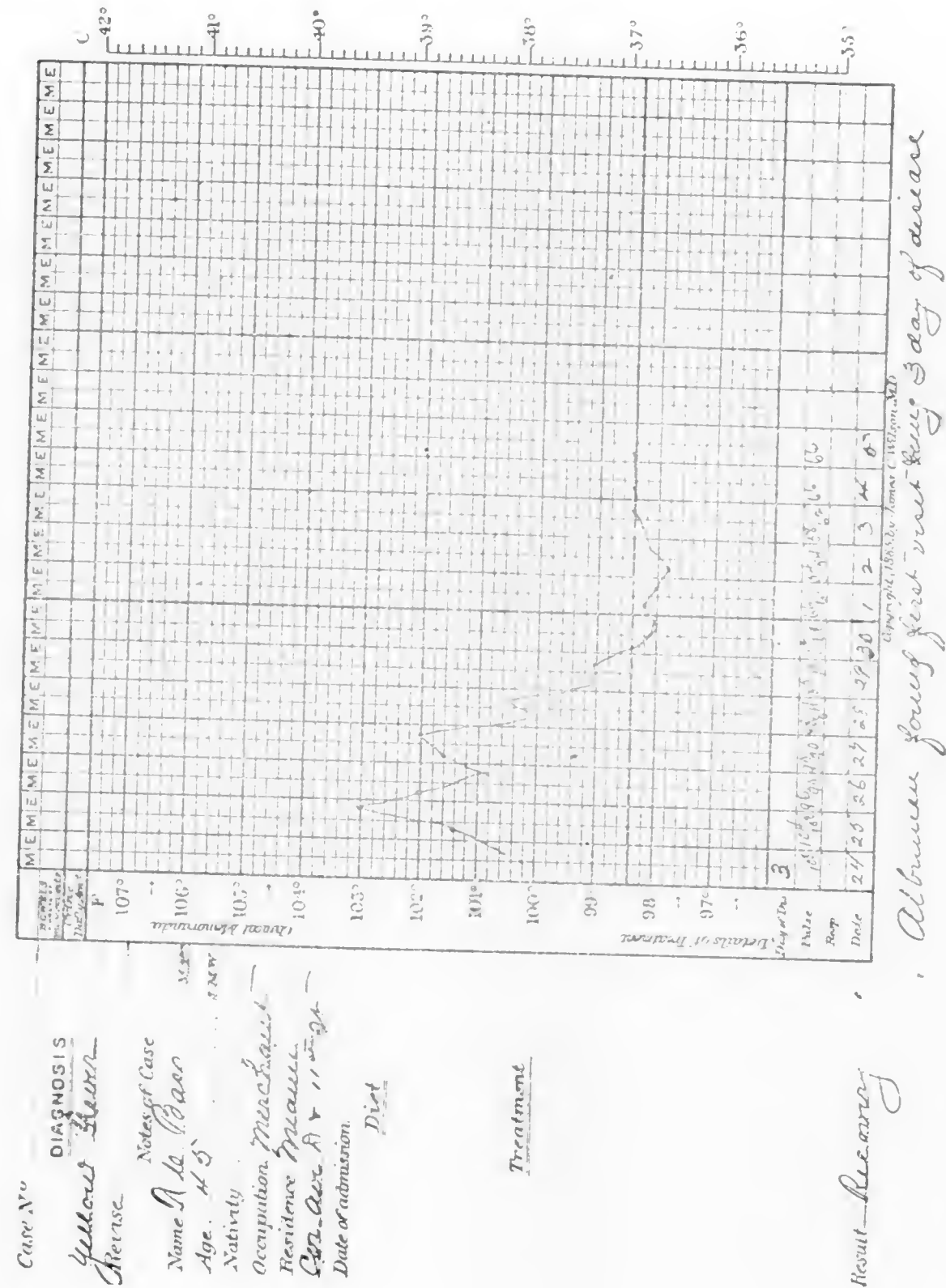
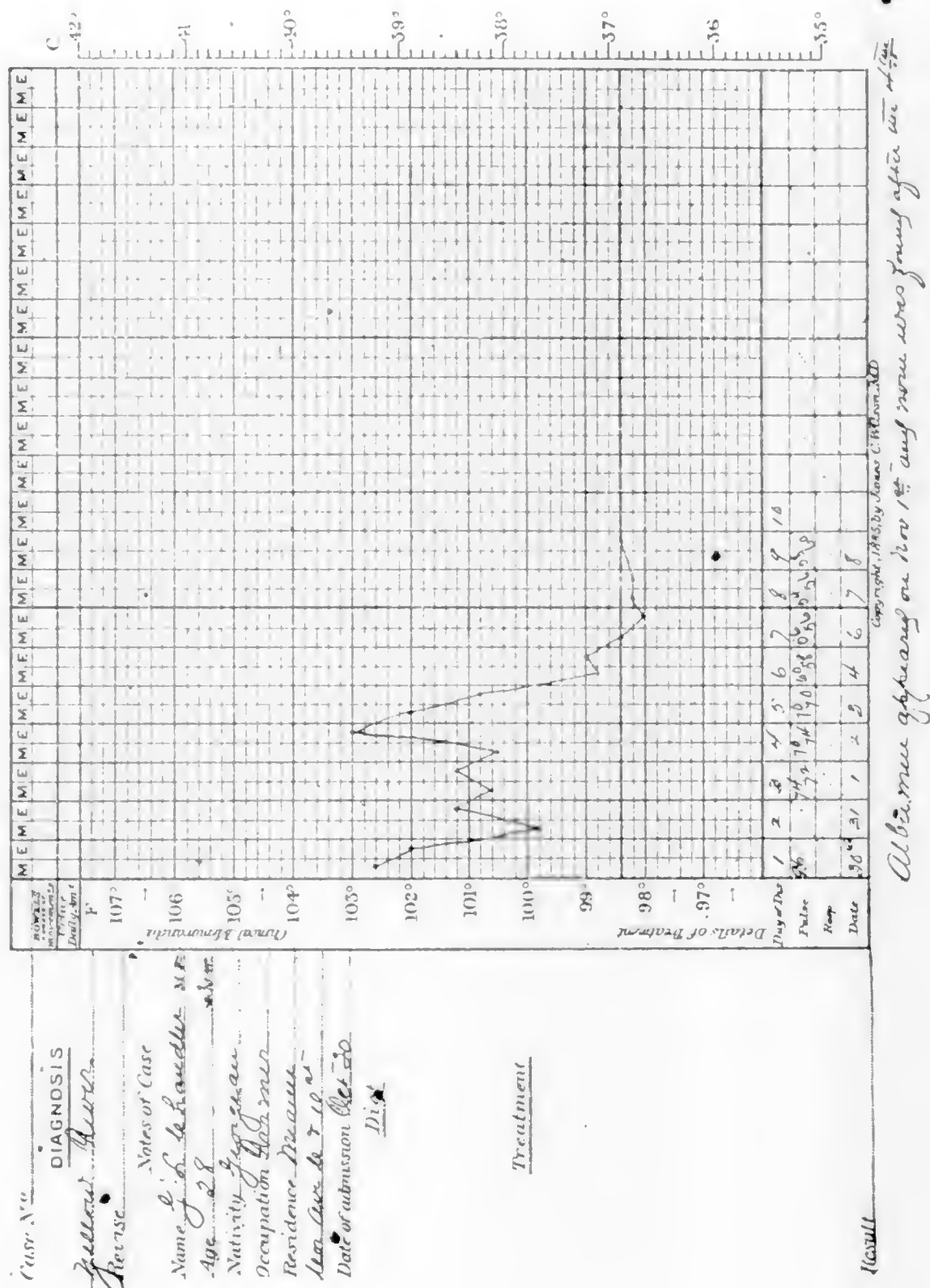


Dr. J. H. H. H.

Case No. 100
 Name J. H. H.
 Age 30
 Sex M
 Occupation Teacher
 Residence Chicago
 Date of admission Aug 21
 Diet ...

Treatment

Result Recovery



Case No.

DIAGNOSIS

Dyspepsia

107

Name *Dr. J. A. Gandy*

Age *22*

Nativity *Massachusetts*

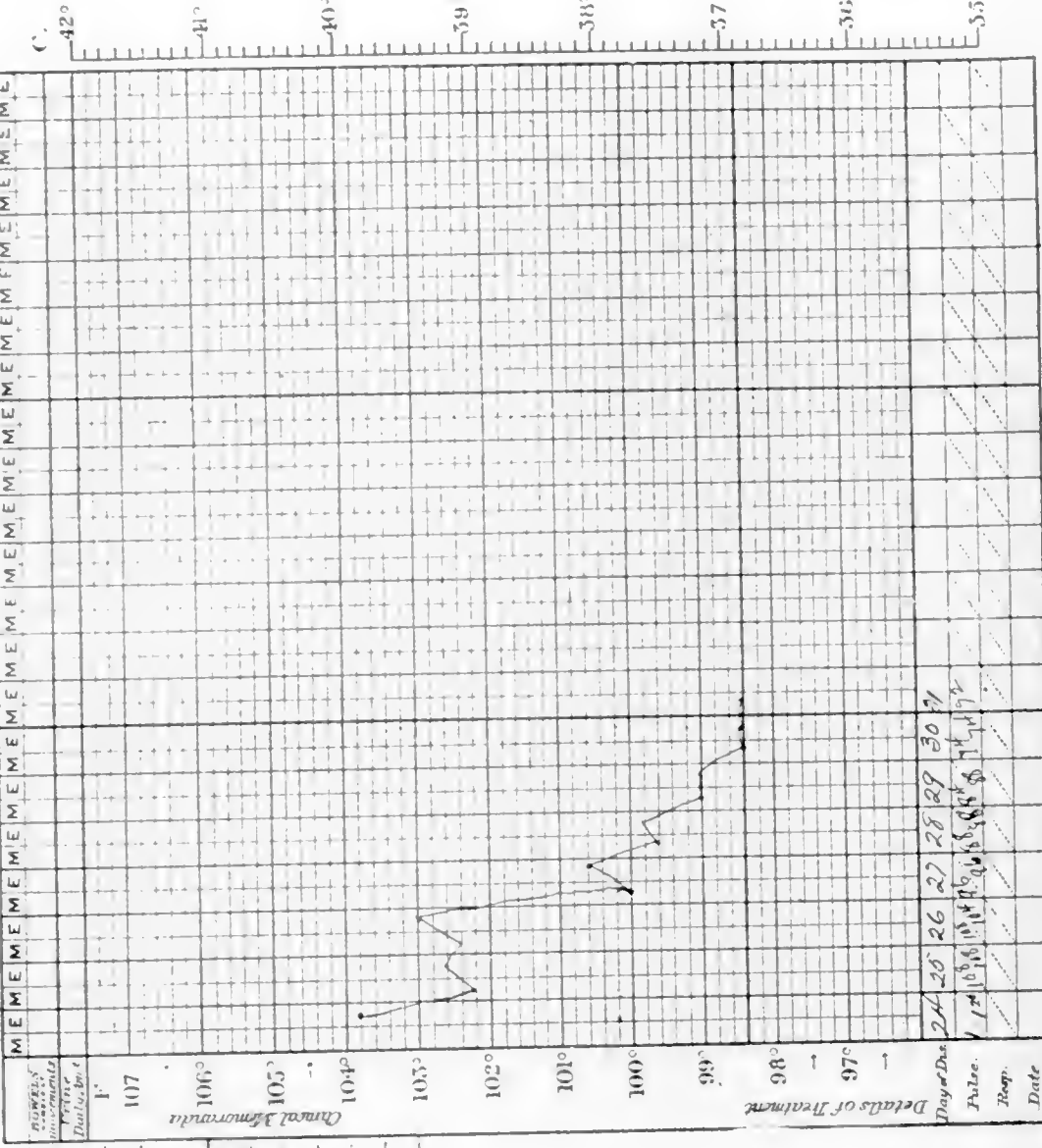
Occupation *Physician*

Residence *Waltham*

Date of admission *Aug. 24*

Died

Treatment



Result

Went in morning 37 4 days no abnormal

Case No.

DIAGNOSIS

Dyspepsia

107

Name *Dr. J. A. Gandy*

Age *22*

Nativity *Massachusetts*

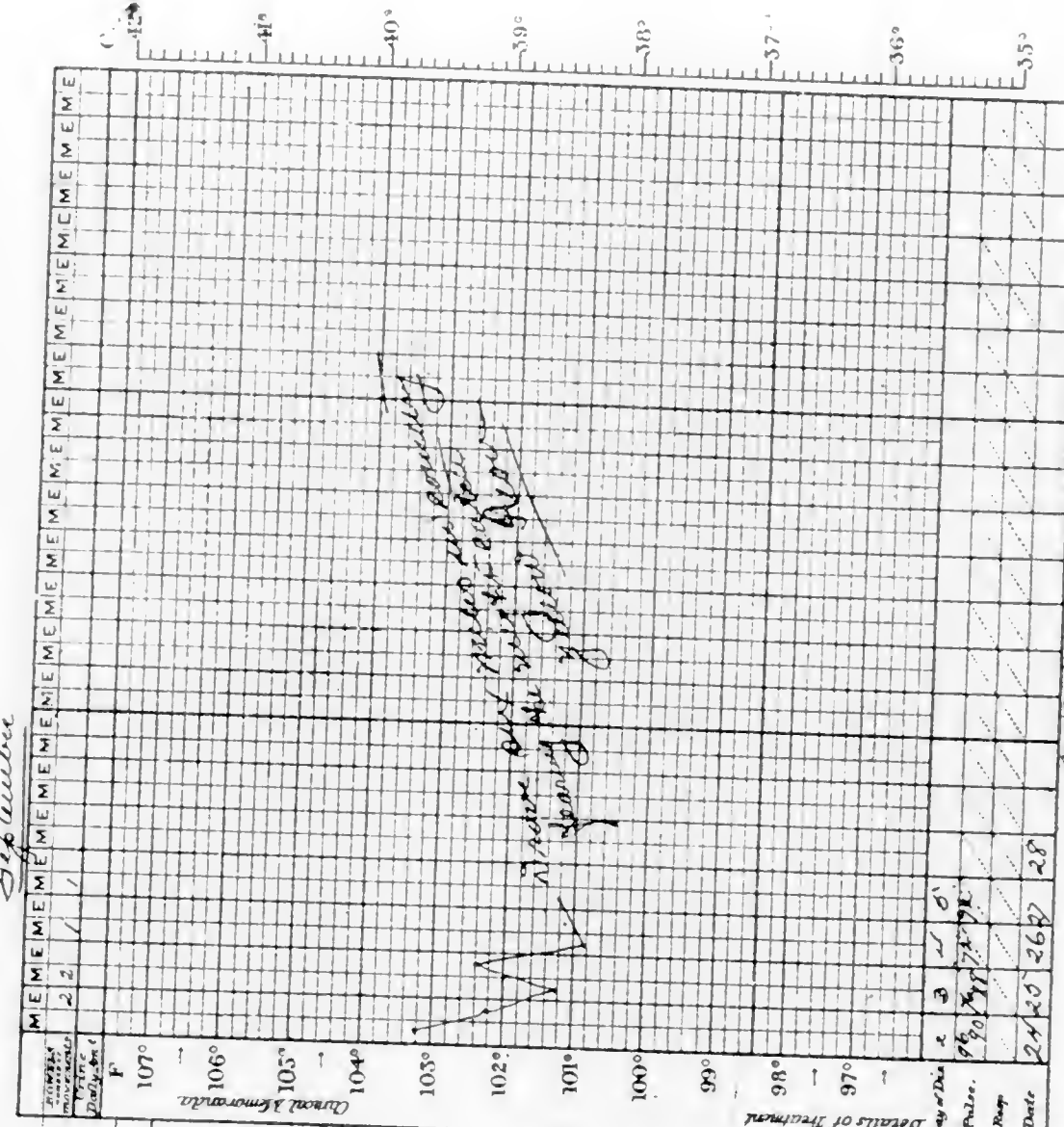
Occupation *Physician*

Residence *Waltham*

Date of admission *Sept. 24*

Died

Treatment



Result

Went in morning 26 4 23 no abnormal

Smallpox in Other States.

In connection with what has been said, in another part of this report (pages 67 et seq.), concerning smallpox, it is deemed not inadvisable to submit the following correspondence in relation to the prevalence of the disease in other parts of the United States. A circular letter was sent to each State Board of Health, and the several replies are here reproduced:

JACKSONVILLE, FLA., February 3, 1900.

DEAR DOCTOR: Will you kindly inform me to what extent smallpox prevails in your State, and whether you believe it to be on the increase or decrease. As fast as it is suppressed in Florida it is re-imported from some one of the adjoining commonwealths. Every case, as soon as it is reported to this office, is taken in charge by a special medical officer of the State Board, and every possible precaution is taken to eradicate the infection, but, as I said before, it is being continually reintroduced. May I not also ask that you place my address on your mailing list and "exchange" with us in the matter of interstate notification of contagious and infectious disease?

Very truly yours,

JOSEPH Y. PORTER, M. D.
State Health Officer of Florida.

ALABAMA.

MONTGOMERY, ALA., February 6, 1900.

Dr. Joseph Y. Porter, State Health Officer:

DEAR SIR: Smallpox exists in about twenty-five counties of this State. In three or four of these counties the disease may be said to be prevailing to some extent; that is to say, the number of cases in each may vary from twenty to a hundred. The reason that I cannot give exact figures is that these counties lie in what is called the "Black Belt," where little or nothing is being done by the county authorities to control the outbreak.

In the others of the twenty-five counties the cases vary from one to ten, and in most or all of these the authorities are taking active measures to exterminate the disease. It may be stated that under our public health system measures for exterminating infectious diseases must be put into active operation by the counties acting separately, the State merely assuming advisory power. All expenses must be met by the counties. Some county authorities make the necessary appropriation of funds, consequently in such counties measures of extermination are being employed; other counties decline to appropriate the necessary funds, and in these little or nothing is being done.

Smallpox has been so generally prevalent for several years, and in so many States, that I have not deemed it necessary to send out formal notices of its presence in Alabama, feeling that it was hardly worth while to notify State officials in whose States the disease was already prevailing. In the pest-house of Jefferson county, in this State, about 400 cases have been treated within the past few months, all negroes, two hundred of whom had recently arrived from Georgia, and a large number, exactly how many I do not now remember, were recently from Mississippi.

These figures indicate to what extent Alabama is receiving infection from other States.

In the fall of 1896 smallpox was imported from Pensacola to Conecuh and Butler counties, in this State, and being unrecognized by the local officials, was not reported to the State authorities until about April 1897. In the meantime the disease had been widely distributed through out the State from these original foci.

Efforts were made during the last meeting of our General Assembly to obtain such additional legislation as is necessary in order to enable us to exterminate the disease, but, owing to active efforts on the part of anti-vaccinationists, we failed of success. As our General Assembly will not meet until next November, we must wait until then to repeat the efforts.

It is very clear that the disease cannot be exterminated unless all States in which it exists make simultaneous efforts to get rid of it.

Very truly,

W. H. SANDERS.

State Health Officer.

ARKANSAS.

LITTLE ROCK, February 5, 1900.

DEAR SIR—Yours of the 2d instant received this morning. Smallpox now exists, or has existed during the past twelve months, in twenty-seven out of the seventy-two counties of the State. Of course in some localities it has prevailed to a very limited extent, and in nearly all cases has been very mild. As fast as the disease has been abated or eradicated at one point it makes its appearance at another, until, during the time mentioned above, it has been very generally distributed over the State. The State Board is entirely without means with which to combat the epidemic, and all it can do is, with the approval of the Governor, to appoint County Boards of Health, which are empowered to take whatever steps deemed necessary for the prevention and suppression of contagious disease in their respective counties. Will be very glad to exchange with your Board any information regarding contagious disease I can, and with all due regard I remain,

Respectfully,

R. B. CHRISTIAN.

CALIFORNIA.

SACRAMENTO, CAL., February 10, 1900.

DEAR DOCTOR—Your favor of late date is received. At present there is not a case of smallpox in California. There were several cases in San Francisco last summer and fall, introduced there by soldiers from Missouri and Kansas, and also from Manila, by soldiers returning thence. All these were immediately quarantined on an island in the Bay of San Francisco, and an epidemic easily prevented. Last winter the city of Los Angeles, in the southern part of this State, suffered rather severely from smallpox (115 cases and 18 deaths). The sources were Arizona and New Mexico. Our southern and eastern borders are now being patrolled by an inspector (a physician) who keeps the State Board of Health, his employer, fully informed of possible danger.

Very truly yours,

W. P. MATHEWS.

Secretary.

COLORADO.

DENVER, COL., February 6, 1900.

DEAR SIR—Yours of February 2d received. The follow-

ing is a statement of the smallpox cases occurring in Colorado and reported to the State Board of Health since January 1st, 1900, and I think it covers all the cases that have occurred within the State:

One case, Denver, January 6, origin unknown; probably Denver; one case, Denver, January 7, origin Folsom, N. M.; from this developed two cases, on January 22d and 25th, respectively. One case, Denver, January 19th, origin Butte, Mont.; one case, January 25th, Denver, origin probably Denver. Total for Denver, six cases.

Three cases near Walsenburg, January 9th, origin, Walsenburg; one case Walsenburg, January 26th, exposed to above case. Total for Walsenburg, four cases.

One case, Hugo, December 15th, origin Lawrence, Kan.; one case, Hugo, January 2d, exposed to previous case. Total for Hugo, two cases.

One case near Leadville, January 17th; origin probably Denver.

Weston, about December 28th, four cases; origin New Mexico.

Total of the State since January 1st, seventeen.

There has been no widespread epidemic during this time; not, indeed, since last June. We require immediate report of every case, and insist upon the following measures to stamp out the disease:

1. Immediate isolation of all cases.
2. Compulsory vaccination and detention for fourteen days following exposure.
3. Fumigation with sulphur for twenty-four hours, using five pounds of sulphur to each 1,000 cubic feet of space, and destruction by fire of such articles as can be burned.
4. We urge vaccination upon all citizens.

I will be glad to place you on the list for interstate notification of contagious and infectious diseases.

Yours truly,

G. E. TYLER, Secretary.

CONNECTICUT.

NEW HAVEN, CONN.

DEAR SIR: Your esteemed favor is received. The enclosed clipping, from our last "Bulletin," I think answers your inquiry.

Very truly yours,

C. A. LINDLEY, Secretary.

"The marked exemption of Connecticut from smallpox, which has prevailed elsewhere so extensively during the past year, is probably due to the general attention of the people to the practice of vaccination. Numerous epidemics of this dreaded disease have occurred throughout 1899, with more or less severity, in a majority of the States of the Union, amounting, in some States, to thousands of cases.

"The wise and effective legislation of Connecticut, which permits the exclusion of unvaccinated pupils from the public schools, has, probably, more than any other factor, saved our people from this pestilence, which has fallen upon so many other communities.

"It is a fact deserving of general attention that wherever the malady has occurred in epidemic form, it has been confined almost exclusively to those who have never been vaccinated. This is the strongest evidence possible of the protective power of vaccination.

"Although Connecticut is covered as with a cobweb, with railroad lines throughout its entire limits, which are possibly transporting daily infected persons or things from localities where smallpox prevails, yet only three cases have tarried in the State in the year, and they were so promptly cared for that the infection was not communicated to others.*

"All honor to the great Jenner; he has again saved Connecticut from smallpox."

*Two of the cases were in January, 1899, and one in July. If you file your notices, I think you will find we told you of them. Your State Board is on our mailing list, but we don't have smallpox.

Very truly yours,

C. A. LINDSLEY.

DELAWARE.

WILMINGTON, DEL., February 9, 1900.

DEAR SIR: Your letter received. Contents noted. There has been nine cases of varioloid reported to the city board in 1899; all recovered, and quarantine removed. No cases throughout the State that I am aware of.

Very truly yours,

DR. ALEX. W. LOWBER, Secretary.

FLORIDA.

JACKSONVILLE, FLA., February 9, 1900.

DEAR SIR: At this writing smallpox seems to be spreading.

despite all efforts to check it by the usual means. Unfortunately, the average person is very indifferent to the matter of vaccination, and has almost to be forced to protect himself or family. Just at present we have information of its general presence in Suwannee county; of a case near Genoa, Hamilton county; of a number of cases five miles north of Monticello, Jefferson county; of one in Escambia county; of over forty cases (white, as well as colored people), near Keystone, in Pasco county, where there was recently a death from this cause. A death from smallpox is reported from near Live Oak. A white man is down with it at Tilton Springs, Hillsborough county. Fernandina, Nassau county, has a number of cases, all of which came direct from Brunswick, Ga., where there has been quite an outbreak. There are nine people at the Duval county pesthouse, several of whom are white. One family of whites, who are isolated in Duval county, trace the infection to a son who is employed on the railway between Jacksonville and Columbia, S. C., where he contracted it. Another white case in Duval county is a railroad conductor. Many cases have been reported from Marion county, and near Ocala. There have been about twenty-five cases in Alachua county, principally about Alachua, LaCrosse and High Springs. Dade county reports a case to-day, traceable to the infected section of Pasco county. And new cases are being reported daily.

Very truly,

JOSEPH Y. PORTER,
State Health Officer.

GEORGIA.

ATLANTA, GA., February 10, 1900.

DEAR SIR: I beg to acknowledge receipt of your letter of the 9th instant, inquiring to what extent smallpox exists in this State and whether it appears to be on the increase or decrease, and in reply to say that the disease exists in some thirty or forty counties in Georgia, so far as I have been advised, and I regret to have to say that I fear it is on the increase.

As you are perhaps aware, in Georgia, in the absence of a State Board of Health, the duty of handling the disease is lodged with the ordinaries of the several counties, and there is no State official clothed with power to look after it. I have, however, within the last two days, applied to the Surgeon General of the Marine Hospital Service of the United States to send me an officer to aid local authorities in the ef-

fort to stamp out the disease. The extreme mildness of its form is one of the greatest obstacles in the way of arresting its spread. In many instances negroes take it and do not go to bed, but rove around and scatter it.

I am advising universal vaccination, as far as possible, but it is difficult to get the ordinaries to resort to this remedy. Under our law they have ample power to vaccinate everybody, who has not been successfully vaccinated, in the county.

Very truly yours,

A. D. CANDLER,
Governor.

ILLINOIS.

SPRINGFIELD, February 6, 1900.

DEAR SIR: Smallpox is, I am happy to say, on the decrease in this State, although there are probably a few hundred cases here yet.

In the matter of interstate notification, I beg to say that up to last autumn, I endeavored to keep each State advised of the cases reported here. Since that time, however, I have neglected to do so for the reason that the disease spread so fast in our State that it was impossible to give the exact number of cases.

As you know, the disease prevails to a large extent over the Southern and central Western States, except in Kansas, where they have nothing but "Cuban chicken pox." We had the Porto Rican variety of this peculiar eruption here, but, owing to the quarantine and the beneficent influence of vaccination, we have been able to check the spread, and hope to be able to stamp it out.

Very truly yours,

J. A. EGAN, M. D.,
Secretary.

INDIANA.

INDIANAPOLIS, IND., February 8, 1900.

DEAR DOCTOR: In reply to your favor of February 2d, smallpox prevails to a considerable degree in Indiana. It has appeared since January 1899, in probably half of the counties, and is now epidemic in Clay, Vigo, Washington, Greene, Owen and Posey counties. The cases in the counties named,

together with those found in other parts of the State, by the most conservative estimate, must number at least one thousand. The form is very mild, but it seems to be becoming more severe. Up to last November we did not know of a single case of semi-confluent, confluent, or hemorrhagic smallpox. Now these are occasionally found. There have been two deaths from hemorrhagic smallpox, and five or six from semi-confluent and confluent. The people, not infrequently, oppose all efforts of the health officers to prevent the spread of the plague, because they believe it interferes with business and with their personal rights. Also many physicians make the mistake of diagnosing the disease as chicken pox, and this makes it more difficult to control. We have no hope of extinguishing the disease by quarantine and disinfection, and so we are trying by all possible means to get the people to vaccinate. This, of course, would stop it. Hoping this is satisfactory, I am,

Very truly yours,
J. N. HURTY,
Secretary.

IOWA.

DES MOINES, February 5, 1900.

DEAR DOCTOR: The January number of the Bulletin, which I presume you have received before this, will inform you as to the number of places in this State where smallpox exists. It is quite prevalent, having been introduced here from Illinois and Minnesota, as well as from the Indian Territory. I will be pleased to send you the Bulletin regularly, if you are not now getting it. I have a telegram this morning announcing smallpox at Mapleton, in this State. I am,

Very respectfully,
J. F. KENNEDY,
Secretary.

KANSAS.

TOPEKA, KANSAS, February 12, 1900.

DEAR DOCTOR: In compliance with the resolutions adopted by the national conference of the State and Provincial Boards of Health, at Toronto, 1886, and Washington, 1887, it becomes my duty to inform you that smallpox has been reported

to this office from the following points in the State of Kansas, during the month of January, 1900.

Anthony, 2 cases; Arkansas City, 9 cases; Burns, Marion Co., 1 case; Centralia, 1 case; Emporia, 10 cases; Galena and Cherokee Co., 31 cases; Grantville, 1 case; Harvey county, 8 cases; Holliday, 1 case; Junction City, 8 cases; Kansas City, 35 cases; Kingman, 4 cases; Lawrence, 34 cases; Osawatomie, 2 cases; Osage City, number of cases not reported; Paola, 1 case; Reno county, 1 case; Shawnee county, 7 cases; Sumner county, 21 cases; Tonganoxie, 1 case; Topeka, number of cases not reported; White Water, Butler county, 1 case; Wabaunsee county, 22 cases; Wichita, 6 cases; Woodson county, 2 cases; Wyandotte county, outside of Kansas City, 29 cases. Only one death occurred during the month—at Arkansas City.

At all of the above points an effective quarantine was maintained; general vaccination was ordered and thorough disinfection of the premises after the disease had run its course. The disease is of a very mild character, as the death rate shows.

Very respectfully,
W. B. SWAN, M. D.,
Secretary State Board of Health.

KENTUCKY.

BOWLING GREEN, KY., February 15, 1900.

DEAR DOCTOR—Your letter just received. We have less smallpox than for several months past, but still have the disease in several sections of the State. The entire epidemic has been very mild in form, and this has caused it to be very little feared. We have advised general vaccination, and have been able to enforce this fairly well in the cities and towns. I mail you under separate cover our rules and regulations. These will explain our methods more fully than I could in the space of a short letter. They are those relied on everywhere in combatting smallpox.

Very respectfully,
J. N. McCORMACK,
Secretary.

LOUISIANA.

NEW ORLEANS, February 5, 1900.

DEAR DOCTOR—In reply to your circular letter regarding

smallpox, I would state that we regularly mail you our weekly report of cases and deaths for the State of Louisiana. Same is in the form of postal card. Please notify me if it does not reach you.

Yours very truly,

G. FARRAR PATTON, M. D.,
Secretary.

A postal card notification, dated February 26th, 1900, gives for week ending February 24, 1900: New Orleans, 55 cases, 23 deaths, and 124 now sick; Caddo, 17 new cases, no deaths, 65 now sick; Madison, one new case and some undecipherable names, 10 new cases.

MAINE.

AUGUSTA, ME., February 6, 1900.

DEAR DOCTOR—We have had no cases of smallpox in the State of Maine since last spring, when we wound up the epidemic which appeared in several of our cities and towns. We will let you know promptly of everything which we have of a seriously infectious nature.

Yours truly,

A. G. YOUNG,
Secretary.

MARYLAND.

BALTIMORE, February 7, 1900.

DEAR DOCTOR—There is no smallpox in Maryland. Since last July (1899) there have been two cases, both in the same house, at Lonaconing, imported from West Virginia. We shall be glad to exchange information as to this and other infectious diseases.

Yours very truly,

JOHN S. FULTON, Esq.,
Secretary.

MICHIGAN.

LANSING, February 5, 1900.

DEAR DOCTOR: Your letter of February 2, asking relative to the status of smallpox in this State, is before me. There are cases of smallpox in this State as follows:

One case at Benton Harbor; 1 case at Watervliet township, Berrien county; and 1 case at Masonville township, Delta county. It is inferred that the outbreak at Masonville township is over, although no final report of the case has been received at this office. I "believe it to be on the decrease."

I believe that no cases of smallpox has gone from this State into any of the "adjoining commonwealths." It is the rule of this State to restrict the disease to the first house in which it occurs; the exceptions to this rule have been more numerous than previously during the past year, for the reason that the cases have been so mild.

Your name is with our list to receive interstate notifications when issued. Smallpox is of such small consequence compared with the other communicable diseases, that this office has not issued "notifications" every week, except by our Weekly Bulletin, so I put your name on the list to receive that, which includes diseases far more important.

Very respectfully,

HENRY B. BAKER,
Secretary.

MINNESOTA.

ST. PAUL, February 6, 1900.

DEAR DOCTOR: Until recently we have reported all cases of smallpox occurring in our State, but our State has not been free from smallpox for at least a year. We seem to be in much the same condition as many other States, namely, suffering from a mild form of the disease which many doctors fail or refuse to recognize as smallpox.

All cases as learned of throughout this State are promptly quarantined. At present we have only a few single cases at different points except at Minneapolis. In this city, the health authorities have been reversing the diagnosis of able men and claiming that there was no smallpox in the city. They are under our club now and are doing their work better.

I will certainly place you on our mailing list for all exchanges.

Yours truly,

H. M. BRACKEN,
Secretary.

MISSISSIPPI.

JACKSON, MISS., February 14, 1900.

DEAR DOCTOR: You ask to what extent smallpox prevails in this State, and what measures are being taken for its eradication. In reply, will state that smallpox prevails in nearly every county in the State, and I really think I can say in epidemic form. We are trying to have general vaccination practiced, and are endeavoring to fumigate and inspect all houses in which the disease occurs.

Yours truly,

J. F. HUNTER,
Secretary.

NEW HAMPSHIRE.

CONCORD, February 5, 1900.

MY DEAR DOCTOR:

In reply to your circular letter of February 2d, I would say that there was not a case of smallpox in the State of New Hampshire, and has not been for the past five years.

We have noticed the prevalence of this disease in a majority of the States of the Union, but have been exceedingly fortunate in not having it introduced here.

I am of the opinion that some of the State Boards of Health are not notifying other Boards of the prevalence of the disease in accordance with the vote adopted by the National Conference of State and Provincial Boards of Health, to-wit: That there should be interstate notification of all contagious and infectious diseases.

- I trust that when you have obtained the data which you are evidently seeking from all the States, you will publish the same for the benefit of the public and those State Boards of Health that are now ignorant of how extensively the disease prevails.

Yours very truly,

IRVING A. WATSON,
Secretary.

NEW JERSEY.

TRENTON, February 6, 1900.

DEAR DOCTOR—In response to the request contained in your communication of February 2d, we hasten to inform you that at present five cases of smallpox exist in the State of

New Jersey. Four of these cases are in an isolated hospital, and another is safely isolated in a farm house one quarter of a mile from any other dwelling.

During the last year smallpox has been imported into New Jersey from time to time, and almost without exception from Virginia. The total number of cases occurring during the year ending October 31, 1899, was 64, but no deaths occurred from this disease. In every instance the outbreak has been speedily controlled, and in no case, so far as we are informed, has the disease spread to any other sanitary district.

Yours very truly,

HENRY MITCHELL,
Secretary.

NEW MEXICO.

TAOS, N. M., February 12, 1900.

DEAR SIR—This Board desires to report four cases of smallpox at Folsom, Union county, the only cases in the Territory. House-to-house vaccination is taking place and a rigid quarantine. The disease was brought in from Oklahoma.

Very respectfully,

T. P. MARTIN, M. D.,
Secretary.

NEW YORK.

ALBANY, February 5, 1900.

DEAR DOCTOR—I am in receipt of your communication of the 2d instant, asking to what extent smallpox prevails in this State.

In reply I am pleased to inform you that we have no official knowledge of any cases of smallpox in the State outside of the city of New York, where there may be two or three cases.

While a number of mild cases of the disease have prevailed throughout the State for some months past, by reason of strict quarantine in all cases we have been able to stamp out the disease.

Very respectfully,

BAXTER T. SMELTER,
Secretary.

NORTH CAROLINA.

RALEIGH, February 6, 1900.

MY DEAR DOCTOR—In reply to yours of 2d instant, I enclose a copy of last monthly Bulletin, in which the situation in this State is candidly set forth. It is about the same now as when the article was written.

The practice of interstate notification of contagious diseases has fallen into "innocuous desuetude" with us, for the simple reason that while I tried conscientiously to give the notification for a long time to our next door neighbors, although they sent us nearly all our smallpox, never sent us any notifications—I say never; Dr. Evans sent me *two* notices during the prevalence of between 12 and 15 hundred cases of the disease, and Dr. Irving, who has been running in Norfolk and vicinity for the past two years a propagating establishment for our especial benefit, apparently, has never sent me one. So I have abandoned it as a farce. I will, however, be pleased to give you any information in my power on demand.

Greensboro and vicinity—along the Southern Railway south from that point—is the region most dangerous to you.

Yours very truly,

RICHARD H. LEWIS,
Secretary.

OHIO.

COLUMBUS, O., February 5, 1900.

DEAR DOCTOR: Your letter of the 2d instant duly received, asking for information about smallpox in Ohio. I print monthly in the Sanitary Bulletin, issued by our board, a list of the places where smallpox has been reported during the preceeding month. I had hoped that this would give sufficient information to our other State Boards as to the localities infected by smallpox in Ohio. If you should prefer to have the information at more frequent intervals, I shall endeavor to comply with your wishes. I do not always get prompt reports of the discharge of cases, so that I am not always able to tell whether the disease is still present in a community where it has been prevailing. The disease is present, or has recently been present, in the following places:

Columbiana county, Wellsville; Coshocton county, Clark township; Cuyahoga county, Cleveland, Brooklyn, Newburg, Dover Mayfield township; Darke county, Greenville, Newburg

and Washington townships; Delaware county, Delaware Girls' Industrial Home; Franklin county, Columbus; Green county, Cedarville; Hamilton county, Cincinnati; Lucas county, Toledo; Madison county, Canaan and Darby townships; Plain City; Mahoning county, Youngstown; Morrow county, South Bloomfield township, Sparta; Trumbull county, Kinsman township, Niles; and Union county, Jerome township.

Yours truly,

C. O. PROBST,
Secretary.

OKLAHOMA.

OKLAHOMA CITY, February 6, 1900.

DEAR DOCTOR: Your esteemed favor of February 2d is at hand, and I desire to report that many cases of smallpox exist in Oklahoma Territory. We have very efficient county boards of health and vigorous means are being taken to quarantine properly every case, and detain suspicious parties who have been exposed, although in the early part of the epidemic we had a large amount of work to do educating the physicians as to the form the disease was assuming, nevertheless at the present time all are awake to the danger that confront us, and nothing will be left undone to protect ourselves and the citizens of other states. I am,

Yours very truly,

L. HAYNES BUXTON,
Superintendent of Health of Oklahoma.

PENNSYLVANIA.

PHILADELPHIA, February 5, 1900.

DEAR DOCTOR—Replying to your favor of the 2d instant, I send you, as requested, our last statement in regard to smallpox. As you will see, it is decidedly on the decrease with us. Your Board has always been on our exchange list, and our annual report and all documents which we issue have been addressed to your name at Jacksonville. I am at a loss to know why you have failed to receive them.

Since my last report, November 4th, 1899, smallpox has been reported in Pennsylvania as follows:

Allegheny county, Pittsburg, 4 cases, 0 deaths; McKee's

Rocks, 1 case, 0 deaths; Westmoreland county, Larimer Mines, 1 case, 0 deaths; Ludwick, 1 case, 0 deaths; Mutual Mines, 1 case, 0 deaths; Jefferson county, Punxsutawney, 1 case, 0 deaths; Bell township, 5 cases, 0 deaths; Indiana county, Blairsville, 24 cases, 2 deaths; Blair county, Altoona, 1 case, 0 deaths; Tioga county, Arnot, 1 case, 0 deaths; Philadelphia county, Philadelphia, 5 cases, 0 deaths; Adams county, Mount Pleasant, 1 case, no deaths; Washington county, Amity, 1 case, 0 deaths; Beaver county, Monaca, 4 cases, 0 deaths.

Yours very truly,
BENJAMIN LEE, M. D.,
Secretary.

RHODE ISLAND.

PROVIDENCE, R. I., February 5, 1900.

DEAR DOCTOR: In reply to your circular letter of the 2d instant, I would state that we have had no cases of smallpox in this State since 1899, when five cases were discovered in this city, the origin of which was traced to Norfolk, Va.

You have doubtless received notification of the above mentioned cases, as it is the custom of this Board to send notifications of all such cases to all State Health Boards and coast cities and towns.

Yours truly,
GARDNER T. SWARTS,
Secretary.

SOUTH CAROLINA.

February 3, 1900.

DEAR DOCTOR: Smallpox continues to make its appearance in the western part of the State. There have been three cases in Florence county, now convalescent; one case at St. George's, well. The disease prevails chiefly on the Savannah river from its source to its mouth. There are some cases near Greenville, and also near Easley and Table Mountain, in Pickens county.

In building the extension of the Atlantic Coast Line from Denmark to Savannah, the contractors brought their laborers from Georgia and Alabama, and spread the disease from Orangeburg to Savannah. There were from one to five cases at Denmark, Govan, Sycamore and Allendale; three cases at Bluffton and two on Hilton Head and two on Dufreskie

Island. The disease has been stamped out at all these places, and prevails now more at Clifton, in Spartanburg, and at Table Mountain than elsewhere in the State. I have not more than fifty cases in the State now, which are at the localities mentioned above. I get most of my cases from the turpentine regions in Georgia and from North Carolina.

I have experts whom I send to every infected locality, and keep there until the disease is under control and every one around is vaccinated. The main difficulty I have to contend against is to secure prompt notification of the presence of the disease in the rural districts. Sometimes it has prevailed for weeks before I know anything about it. I have been endeavoring to obtain from this Legislature an extension of our health organization to the townships, to remedy this very evil.

Yours truly,
JAMES EVANS, M. D.,
Secretary.

TENNESSEE.

NASHVILLE, February 6, 1900.

DEAR DOCTOR: Your communication of recent date, concerning the smallpox situation in this State, has just been received, and in reply we can truthfully report smallpox on the decrease. We have fought the disease since it first made its appearance in our State, some two years back, and have experienced the same trouble referred to in your letter—that is, being re-infected from time to time.

We shall be glad to hear from you at any time, and will cheerfully furnish you with any information at hand.

Very respectfully,
STATE BOARD OF HEALTH,
By J. A. Albright, M. D.,
Secretary and Executive Officer.

TEXAS.

AUSTIN, TEX., February 6, 1900.

DEAR DOCTOR: Replying to yours of the 3d instant, I beg to state that the Public Health Reports of the Marine Hospital Service will contain all the information relative to smallpox in this State. I will state in addition that the disease is mild in most localities, rarely ever

exceeding two per cent., and on this account the disease is usually not reported to us until it has made some headway. Our system depends upon the county health officers of the State for the enforcement of local quarantine measures, though these officers are subject to the orders of the State health officer. These local officers are usually experienced and efficient, and unless hampered by lack of funds, fully carry out our smallpox regulations, a copy of which is enclosed.

The disease made considerable progress from the 1st of January to the latter part of the month, but now seems to be decreasing again. As to our success, it is the same as yours—we soon succeed in eradicating it from any known focus, but it is constantly reappearing in other places, and is usually brought in from surrounding States, especially from Arkansas and the Indian Territory. I have unofficial advices that it is epidemic in many places in both and that little or no effort is made to suppress it. As to your request to exchange information, I will gladly place you on my mailing list as soon as the clerical force at my disposal will admit of my exchanging notifications with all the interested States, which, I am sorry to state, is impracticable at present. I will again assure you that Public Health Reports will contain all the information that this office possesses. If any other information in detail is wanted at any time, I will furnish it to you with pleasure. Will you not join me in urging the M. H. S. to take charge of and eradicate the disease in the I. T.? If so, write or wire Wyman at once. I am

Yours very truly,
W. F. BLUNT, M. D.,
State Health Officer of Texas.

VIRGINIA.

RICHMOND, VA., March 1, 1900.

DEAR DOCTOR: Your letter relative to the extent of smallpox, and whether it is on the decline or increase, was duly received. I regret I am a little tardy in sending you the desired information. Smallpox has been in Virginia for the last two years. Last spring it was epidemic to a great extent in the cities on the sea coast. While we have had it to some extent all the summer and fall, yet it seems to have taken on new life and is beginning to make its appearance in a mild form in almost every section of the State. We have had it in

at least thirty counties and cities. Assuring you of my esteem and best wishes, believe me,

Yours very truly,
PAULUS A. IRVING,
Secretary.

WASHINGTON.

PULLMAN, WASH., February 14, 1900.

DEAR DOCTOR: There is in the State of Washington at present less than one hundred cases of smallpox. The half of these cases are in Spokane.

The disease is on the decrease, as there is thirty per cent. less cases now than there were a month ago. We have succeeded in entirely freeing the State from smallpox, but we had the same experience as you, in that it was constantly being brought into the State from the outside.

I am sorry, but the financial condition of the State Board of Health at present is such that we have no funds to make reports with.

Trusting that some day we may fall in line with the rest of you, I am,

Yours very truly,
S. B. NELSON,
Secretary.

WEST VIRGINIA.

POINT PLEASANT, W. VA., February 23, 1900.

DEAR DOCTOR: Smallpox prevails to an alarming extent in our State. In the south and southwest, bordering on the line of Kentucky and Virginia, Wayne, McDowell, Mingo, Mercer and Fayette, we have been infected with the epidemic from Kentucky and Virginia, one or perhaps two cases from Ohio. In the counties above named, we have in population alone in negroes, employed in coal and coke industries, and it is very hard to control them even with strongest guards. In the counties east and northeast and in the central portion of our State, we have been infected from Ohio, Pennsylvania and Maryland, mostly, however, from Ohio and Pennsylvania, and in the latter State particularly from Pittsburg. First made appearance about Christmas or little after the holidays in our State University at Morgantown, Monongalia county,

in students who had been visiting in Ohio and Pittsburg, infecting our State school, simultaneously one student visiting Ohio and the other Pittsburg, Pa., and from dispute among doctors in regard to diagnosis, some contending "*Chicken Pox, Cuban Itch, Filipino Scratches, and some Varioloid*," during which time people were indifferent and not disposed to accept *smallpox diagnosis*; and many people from different parts of the State visiting Morgantown (State University) were exposed to the disease, and returning to respective homes in *Gilmer, Lewis, Harrison, Ritchie, Calhoun, West, Webster and other counties* in the interior of the State (*numbering in the aggregate some 18*), after the usual period of *incubation* from date of exposure at State University, the whole set thus exposed were stricken down. Those who had been (especially of late) successfully vaccinated, with discrete, and those who had never been vaccinated, with confluent smallpox; some (not many) dying, and others losing an eye or two. We are now getting our people to understand the importance of *vaccination and re-vaccination*, and co-operating with the Medical Health Officers in support of means for "pesthouses," "houses of detention," pay for guards, etc., and we are now getting in fair headway to manage *quarantine, guards, etc.*, and are suppressing and stamping the disease out in many places; but no sooner this done, some tramp comes in again from Kentucky, Ohio, Pennsylvania, Maryland or Virginia, and we have more of it. Our State and Local Health Boards are handicapped by means of the *niggardly appropriation* of our State Legislature. All told, for all health and sanitary work, and salaries, stationery, postage, express, the pitiful sum of fifteen hundred dollars, including salary, stationery, forms, etc., for Registrar of Vital and Mortuary Statistics, we simply have to do *the best we can*.

The introduction and re-introduction of the infection of smallpox in this State is much like that in your own State, and what the end is to be "no man knoweth."

I shall with great pleasure place your name on our "mailing list for exchange," and reciprocate in all matters of interstate, etc., appreciating and sympathizing with you in your arduous duties. I am sincerely,

A. R. BARBEE,

Sec. and Exec. Officer S. of H., W. Virginia.

WISCONSIN.

MILWAUKEE, February 8, 1900.

DEAR DOCTOR: Replying to your circular letter of the 3d instant, relative to smallpox, I have to state that up to three or four weeks ago this State was entirely free from the disease, and had been for nearly a year. About that time a young man came from Iowa with the disease, and visited at Lemonweir, Juneau county, this State, and from that case there have been eleven cases, including his own, with one death—an infant six weeks old. About a week ago another case was brought into the State at Gratiot, Lafayette county, from Dixon, Ill., where the disease exists. These are all the cases we have at the present time, and they are still quarantined, and all precautions are being taken.

I am informed that there are many cases in Ohio, Indiana, Iowa, Illinois and Pennsylvania, and on account of its being so light physicians are not called until there is great exposure, and in many instances a faulty diagnosis is made, and thus the disease spreads.

Shall be pleased to place your name on our mailing list in the future.

Very truly yours,
U. O. B. WINGATE,
Secretary.

COMPULSORY VACCINATION.

A circular making inquiry as to compulsory vaccination was also sent out. The letter of inquiry and the several replies received follow:

JACKSONVILLE, FLA., February 5, 1900.

DEAR SIR: Will you kindly favor us with a copy of your law, or rule, or regulation relating to vaccination? Has your board the power to order compulsory vaccination, and has it ever done so, and with what result? The legal advisers of the Florida Board rather discourage our resorting to such a measure. Can and will you apprise me somewhat as to this matter in your commonwealth? Have your courts ever made a ruling as to your enactment? Any information you can give me will be greatly appreciated.

Very truly yours,
JOSEPH Y. PORTER, M. D.,
State Health Officer of Florida.

CALIFORNIA.

SACRAMENTO, CAL., February 12, 1900.

DEAR DOCTOR: In compliance with your request, contained in letter of 5th instant, I send you to-day, under another cover, a copy of the sanitary laws of California, containing particularly a provision for vaccination in this State. As smallpox has been rare in this State during recent years, this law has not been rigidly enforced. The city of San Francisco is the only community that constantly enforces its provisions. The other portions of the State seem to prefer, in spite of our efforts to the contrary, to wait until danger threatens. The law providing for a vaccine agent is no longer in no force. Very recently the State Board of Health has required the inmates of every State institution (prisons, insane asylums, etc.) to be vaccinated. The local health authorities are responsible for the enforcement of the law in other respects.

Very truly, yours,

W. P. MATHEWS, Secretary.

ILLINOIS.

SPRINGFIELD, ILL., February 10, 1900.

DEAR DOCTOR: Our Board has no power to enforce compulsory vaccination. I doubt if any board has. We have, however, during the prevalence of smallpox in the State, power to prohibit gatherings of persons not vaccinated, and can, of course, prohibit the admission to schools of any children who do not present evidence of proper vaccination. We can also quarantine, for twenty-one days or more, persons exposed to smallpox who have not been vaccinated. For Supreme Court decisions *re* vaccination, let me refer you to the following, all there are on record, I think.

Potts et al. vs. Breen et al., Illinois.

Lawbaugh et al. vs. Board of Education, Illinois.

Blue vs. Beach et al., Indiana (just rendered).

Morris vs. City of Columbus, Ga.

The enclosed shows the order of this Board on the subject, which order, as construed by our courts, in operation only when smallpox prevails, or when there is good reason to apprehend a visit from the disease.

Very truly yours,

J. A. EAGAN, M. D., Secretary.

LOUISIANA.

NEW ORLEANS, LA., February 9, 1900.

DEAR DOCTOR: In reply to yours of the 5th instant, I have to inform you that the Constitution of Louisiana prohibits the passage of any law making vaccination compulsory.

We get around this in a measure by forbidding the admission of unvaccinated children to public schools.

We also do a good deal by moral force, and in many cases actually "bluff" people into submission.

This is how the matter stands in Louisiana.

Yours very truly,

G. FARRAR PATTON, M. D., Secretary.

MAINE.

AUGUSTA, ME., February 10, 1900.

DEAR DOCTOR: The State Board of Health of Maine has no authority to make rules relating to vaccination. On pages 15 and 17 of the copy of *Abstract of the Health Laws*, which I send to you, you will find the law of this State relating to vaccination. The law makes it obligatory upon local boards of health to offer vaccination, but the individual cannot be obliged to accept it. In the presence of an outbreak of smallpox, or impending danger of one, we find there is not much trouble in getting pretty thorough vaccination of the people, and sometimes the quarantine authority of the local board furnishes a compulsive power. I am not aware that our courts have ever made a ruling on any question relating to vaccination.

Yours truly,

A. G. YOUNG, Secretary.

MICHIGAN.

LANSING, MICH., February 8, 1900.

DEAR DOCTOR: Replying to your letter of February 5, relating to vaccination, there is no law nor rule in Michigan compelling vaccination. The nearest approach to such a law is in Act 137, Laws of 1883, on page 3 of our pamphlet, "The Work of Health Officers," a copy of which is sent you by this mail, wherein you will see that the Health Officer is required "to order the prompt vaccination or isolation of persons who have been exposed to smallpox."

The State Board has no power to order compulsory vaccination, and, if it had the power, I do not think it would ever do so. Vaccination is too important a measure to have arrayed against it the opposition of the masses to an arbitrary law compelling something that the public has no right to compel. If the public wants protection from smallpox, all its members have to do is to get *themselves* vaccinated; not to compel some individual to be vaccinated who does not wish such protection. Approaching people with a compulsory law makes it very difficult to get them to accept facts and arguments which, under other circumstances, they would accept.

By *educational* methods smallpox has been practically stamped out in Michigan. When introduced, the disease is restricted to the first house in which it occurs.

Very respectfully,

HENRY B. BAKER,
Secretary.

OHIO.

COLUMBUS, O., February 9, 1900.

DEAR DOCTOR: Your letter of the 5th instant just received. Some years ago this Board adopted a rule that no child should attend public or parochial schools that had not been vaccinated. We raised a storm of opposition, and, not receiving the support of our Attorney-General as to the legality of our action, were obliged to retire with the best grace possible. Recently our Attorney-General has decided that any local Board of Health, when smallpox is actually present within its jurisdiction, may require vaccination of school children. The Supreme Court of Indiana has just rendered a decision upholding a rule of the State Board of Health requiring the vaccination of school children at a time when smallpox is actually present.

Yours truly,

C. O. PROBST,
Secretary.

SOUTH CAROLINA.

FLORENCE, S. C., February 7, 1900.

DEAR DOCTOR: The Legislature last year passed a compulsory vaccination law, which I direct all Health Officers to enforce whenever it is necessary. If any person refuses vac-

ination after exposure to smallpox, or who resides near an infected locality, and the Health Officer thinks that the public safety requires his vaccination, he can go before any magistrate and sue out a warrant for his arrest, and have him fined and imprisoned, and confined until he consents to vaccination, or, in the opinion of the Health Officer, he is no longer capable of communicating the disease. I am not aware that our higher courts have made any ruling on the subject, or that it has in any instance been brought up for adjudication before them. If I can procure a printed copy I will send it to you.

Yours truly,

JAMES EVANS, M. D.

TEXAS.

AUSTIN, TEX., February 14, 1900.

DEAR DOCTOR: Replying to your favor of the 5th instant, regarding compulsory vaccination, I beg to state that I am entirely without authority in the premises. It is doubtful if we can compel vaccination in persons known to have been exposed to smallpox. Several of our cities have assumed the power of forcibly vaccinating their indigent population, the term of indigency being stretched so as to include all the colored population and the floating population. I enclose you a recent decision of the Attorney-General of this State, which opinion is derived from common law, and may be applicable to your condition.

In any way that I can serve you, Doctor; I am at your command.

Very truly,

W. F. BLUNT,
State Health Officer.

WISCONSIN.

MILWAUKIE, WIS., February 9, 1900.

DEAR DOCTOR: I am in receipt of yours of the 5th instant, relating to compulsory vaccination. In reply I have to state that we have no law in this State relative to vaccination, and the only means we have is moral suasion. A number of years ago this board acted by legal advice, and, according to the statutes of the State, adopted rules requiring all children to be vaccinated, as a condition for admittance into the public

and private schools in this State. A great deal of vaccination was done at that time, but eventually the Christian Scientists brought the matter into court, and that court decided that the law directing the State Board of Health to pass such rules was unconstitutional, and that it could not delegate to our board any such power. The opinion rendered by the Supreme Court was quite lengthy, and defined more or less the duties of the State Board of Health, but distinctly stated that we could not make any such rules that contained the semblance of law. This being the case, vaccination in this State, as stated before, can only be performed through the influence of moral suasion.

Any further information I may possess concerning this matter will be cheerfully given.

Very truly yours,

U. O. B. WINGATE, Secretary.

BIRTH AND DEATH RATES,

by sections, based upon reports made to the office of the State Board of Health, based upon reports made to the office of the State Board of Health, during year 1899, showing rates per 1,000 of population for Atlantic and Gulf Coasts and Interior Counties. Population figures of 1895:

ATLANTIC COAST COUNTIES.

	BIRTH RATE.	DEATH RATE.
Nassau.....	11.19	13.45
Duval.....	26.95	32.57
St. Johns.....	25.03	14.53
Brevard.....	24.34	14.26
Volusia.....	17.33	9.66
Dade.....	29.19	24.74
Rate for Atlantic Coast.....	22.34	18.20

GULF COAST COUNTIES.

Escambia.....	19.77	15.95
Santa Rosa.....	10.86	7.96
Walton.....	15.69	7.43
Washington.....	17.39	8.44
Calhoun.....	24.44	11.60
Franklin.....	31.06	15.64

Wakulla.....	20.01	4.59
Jefferson.....	13.26	4.93
Taylor.....	9.14	5.22
Lafayette.....	16.65	9.25
Levy.....	14.73	9.28
Citrus.....	14.78	13.84
Hernando.....	12.92	11.56
Pasco.....	25.97	12.56
Hillsborough.....	12.81	7.62
Manatee.....	30.28	17.25
DeSoto.....	19.79	16.82
Lee.....	19.77	11.68
Monroe.....	32.91	28.07

Totals for Gulf Coast.....	18.54	11.56
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INTERIOR COUNTIES.

Alachua.....	15.03	8.55
Baker.....	21.82	5.11
Bradford.....	17.58	7.36
Clay.....	18.65	8.84
Columbia.....	26.75	13.29
Gadsden.....	15.11	6.56
Hamilton.....	13.11	5.60
Holmes.....	16.84	4.81
Jackson.....	9.07	4.01
Lake.....	14.25	13.89
Leon.....	7.70	7.09
Liberty.....	24.53	3.31
Madison.....	17.84	6.14
Marion.....	16.45	9.92
Orange.....	19.66	11.76
Osceola.....	16.79	4.41
Polk.....	18.57	13.47
Putnam.....	24.25	13.09
Sumter.....	20.72	9.15
Suwannee.....	16.10	9.01

Totals for Interior Counties.....	17.54	8.41
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DEATH RATES OF THE STATE OF FLORIDA.

MONTH..	1891	1892	1893	1894	1895	1896	1897	1898	1899	T'L
Jan.....	16.19	16.65	11.07	11.34	9.53	8.01	9.46	6.83	10.16	11.02
Feb.....	13.02	12.41	9.82	8.13	8.81	6.91	8.55	6.53	8.03	9.13
March....	12.36	14.91	10.65	8.45	8.01	8.01	8.48	6.68	9.37	9.65

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April	13.22	14.35	11.87	9.83	9.31	9.31	9.04	7.94	11.13	10.66
May	11.75	18.51	12.92	9.95	10.87	9.34	7.90	7.97	10.34	11.06
June	12.64	15.22	6.88	10.02	13.05	9.10	8.39	10.24	11.87	10.88
July	16.24	13.75	6.88	10.08	9.54	9.06	8.78	11.26	13.31	10.98
Aug.	13.33	14.27	9.24	11.88	10.41	9.24	8.14	15.07	14.10	12.85
Sept.	12.37	10.39	8.01	9.73	9.79	9.36	7.09	19.89	14.33	11.21
Oct.	12.66	13.41	9.65	9.16	8.91	8.79	6.90	16.96	15.12	11.28
Nov.	14.23	11.40	10.39	9.31	8.60	7.57	7.57	12.77	11.13	10.33
Dec.	11.58	11.03	9.33	8.01	8.43	8.94	6.77	12.43	11.24	9.75

Whole

Year..... 13.22 13.86 10.02 11.66 9.60 8.63 8.09 11.29 11.67 10.89

BIRTH RATES OF THE STATE OF FLORIDA.

MONTH.	1891	1892	1893	1894	1895	1896	1897	1898	1899	T.L.
Jan.	15.33	15.73	15.39	16.89	18.72	13.30	13.49	11.35	16.60	15.19
Feb.	13.49	12.14	13.13	15.26	15.04	13.54	10.61	10.66	14.45	13.13
March	16.81	15.07	13.68	15.28	13.87	13.87	11.86	9.38	15.65	13.94
April	14.66	16.82	11.44	13.40	13.53	13.53	10.60	9.85	13.81	13.07
May	11.66	14.95	12.02	12.29	10.98	11.60	10.45	9.25	11.99	11.77
June	15.93	12.87	12.49	13.85	9.77	10.91	10.92	10.89	14.32	12.45
July	14.39	14.62	11.67	15.66	13.22	9.84	12.01	14.73	16.97	13.67
Aug.	15.93	18.34	11.17	16.80	16.38	13.97	13.37	18.40	21.57	16.21
Sept.	16.69	15.57	15.11	17.02	15.67	15.46	11.68	21.73	22.59	16.84
Oct.	11.08	15.62	16.09	17.06	11.81	13.33	9.81	18.12	21.84	14.97
Nov.	13.46	17.45	15.72	15.39	13.07	14.30	8.82	17.29	20.21	15.07
Dec.	17.11	15.96	16.18	16.58	13.02	14.54	10.68	19.24	16.06	15.48

Whole

Year..... 14.72 15.42 13.68 15.47 13.80 13.18 11.19 14.23 15.50 13.20

BIRTH AND DEATH RATES,

Based upon returns for five years, ending December 31st, 1898, showing rates per 1,000 for Atlantic, Gulf and Interior Sections:

ATLANTIC COAST COUNTIES.

	BIRTH RATE	DEATH RATE
Nassau	11.45	8.43
Duval	26.19	29.74
St. Johns	20.91	5.41
Brevard	24.52	11.58
Volusia	13.17	8.70
Dade	10.43	6.41
Rate for Atlantic Coast	17.76	11.71

GULF COAST COUNTIES.

Escambia	20.86	13.91
Santa Rosa	6.74	7.21
Walton	15.28	7.56
Washington	10.05	4.51
Calhoun	20.70	16.42
Franklin	33.07	11.18
Wakulla	7.06	3.85
Jefferson	6.06	3.28
Lee	21.36	11.31
Lafayette	5.79	3.25
Levy	14.94	8.01
Citrus	24.72	13.36
Hernando	12.20	7.43
Pasco	18.73	9.98
Hillsborough	18.47	11.64
Manatee	20.52	9.74
De Soto	18.57	7.48
Taylor	10.18	3.40
Monroe	27.96	27.83

Totals for Gulf Coast..... 16.48 9.54

INTERIOR COUNTIES.

Alachua	8.49	5.36
Baker	11.20	3.90
Bradford	16.41	3.59
Clay	9.12	5.08
Columbia	12.24	7.52
Gadsden	13.38	4.27
Hamilton	7.61	4.77
Holmes	10.70	3.22
Jackson	5.30	2.98
Lake	14.68	7.36
Leon	4.95	4.01
Liberty	26.58	2.47
Madison	4.86	3.25
Marion	9.78	9.41
Orange	18.99	9.17
Osceola	16.92	5.61
Polk	13.94	8.27
Putnam	10.08	7.13
Sumter	13.42	6.30
Suwannee	9.90	7.22

Totals for Interior Counties..... 11.92 5.54

BIRTHS, MARRIAGES AND DEATHS.

Births, marriages and deaths reported from the several counties in the State of Florida during the year ending December 31st, 1899. Population, State census of 1895:

	POPULATION.	BIRTHS.	MARRIAGES.	DEATHS
Alachua	28,207	424	332	241
Baker	3,712	81	58	19
Bradford	9,499	164	93	70
Brevard	4,558	111	54	65
Calhoun	3,274	81	48	38
Citrus	4,261	63	71	59
Clay	5,200	97	48	46
Columbia	12,935	346	158	172
Dade	3,322	97	88	82
De Soto	6,418	127	83	108
Duval*	34,766	148	487	132
Escambia	22,503	445	390	359
Franklin	4,475	139	47	70
Gadsden	13,693	208	173	90
Hamilton	9,991	131	139	56
Hernando	2,940	38	25	34
Hillsborough	31,362	402	435	239
Holmes	6,232	105	116	30
Jackson	21,930	199	289	88
Jefferson	15,007	199	135	75
Lafayette	3,783	63	69	35
Lake	8,349	119	72	116
Lee	2,235	44	25	26
Leon	19,597	151	228	139
Levy	7,534	111	98	70
Liberty	2,079	51	45	07
Madison	13,660	244	209	84
Manatee	3,830	116	73	66
Marion*	21,875	360	244	217
Monroe	17,167	566	298	482
Nassau	8,843	99	111	119
Orange	12,459	245	123	184
Osceola	3,394	57	35	15
Pasco	4,697	122	47	59
Polk	10,983	204	98	148
Putnam	11,381	276	134	149
St. Johns	7,708	193	90	112
Santa Rosa	8,914	97	122	71
Sumter	5,308	110	61	48

Suwannee	12,554	202	185	113
Taylor	3,062	28	50	16
Volusia	11,480	199	115	111
Wakulla	3,700	74	99	17
Walton	7,962	125	96	60
Washington	7,820	136	116	66
Jacksonville*		553		752
Ocala*		80		35
Total	464,639	8,180	6,112	5,390

*It will be observed that the City of Jacksonville and Duval county are reported separately. The same is also true of Ocala and Marion county.

BIRTH AND DEATH RATES

per 1,000 of population, for each of the forty-five counties of the State of Florida, based on reports made to the office of the State Board of Health during the year ending December 31st, 1899. Population State Census, 1895.

	POPULATION	BIRTH RATE.	DEATH RATE.
Alachua	28,207	15.03	8.55
Baker	3,712	21.82	5.11
Bradford	9,499	17.58	7.36
Brevard	4,558	24.35	14.26
Calhoun	3,274	24.44	11.60
Citrus	4,261	14.78	13.84
Clay	5,200	18.65	8.84
Columbia	12,935	26.75	13.29
Dade	3,322	29.19	24.71
DeSoto	6,418	19.79	16.82
Duval	34,766	26.95	32.57
Escambia	22,503	19.77	15.95
Franklin	4,475	31.06	15.64
Gadsden	13,693	15.11	6.56
Hamilton	9,991	13.11	5.60
Hernando	2,940	12.92	11.56
Hillsborough	31,362	12.81	7.52
Holmes	6,232	16.84	4.81
Jackson	21,930	9.07	4.01
Jefferson	15,007	13.26	4.93
Lafayette	3,783	16.65	9.25

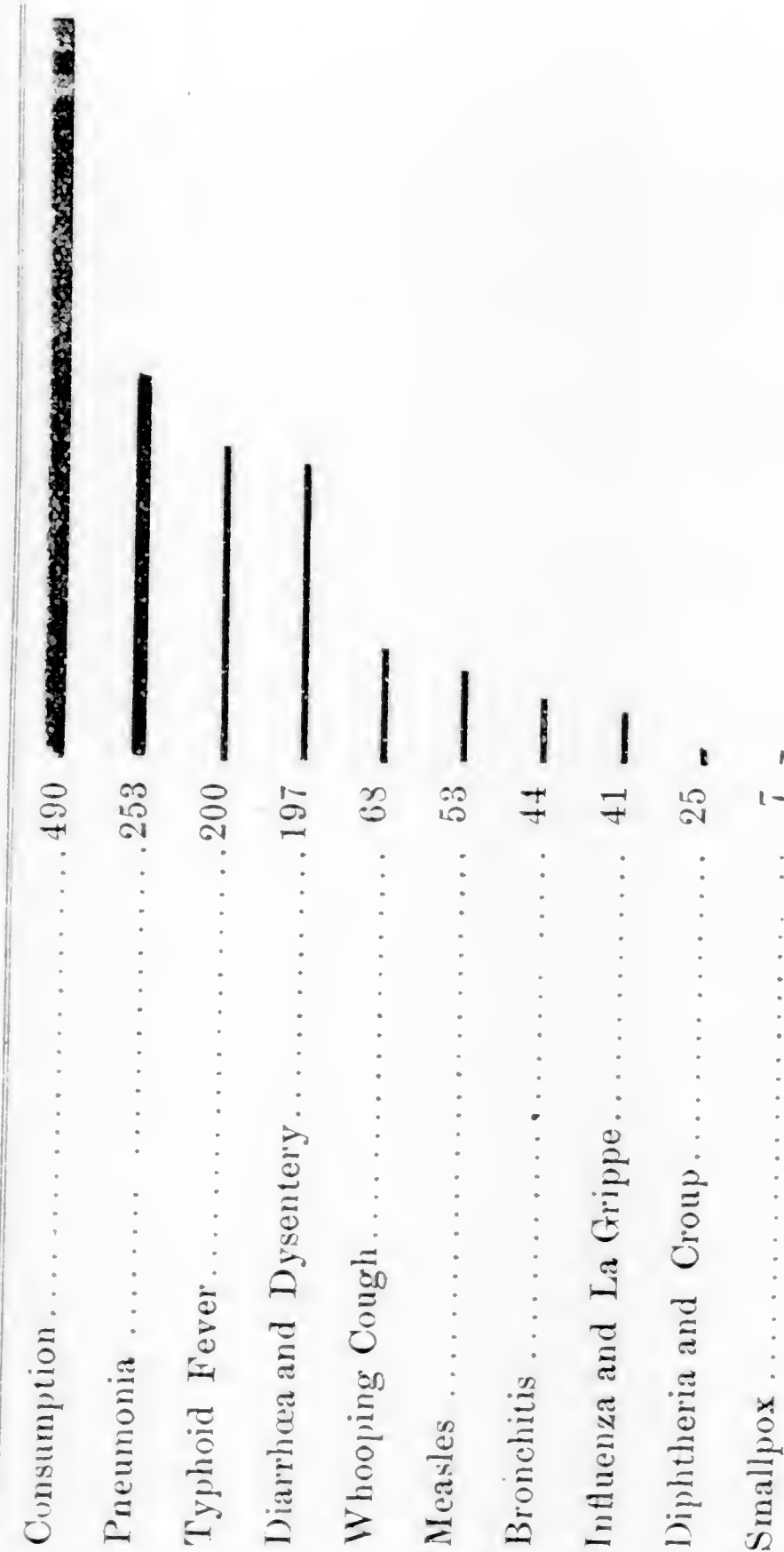
Lake	8,349	14.25	13.89
Lee	2,225	19.77	11.68
Leon	19,597	7.70	7.09
Levy	7,534	14.73	9.28
Liberty	2,079	24.53	3.31
Madison	13,660	17.84	6.14
Manatee	3,830	30.28	17.25
Marion	21,875	16.45	9.92
Monroe	17,167	32.91	28.07
Nassau	8,843	11.19	13.45
Orange	12,459	19.66	14.76
Osceola	3,394	16.79	4.41
Pasco	4,697	25.97	12.56
Polk	10,983	18.57	13.47
Putnam	11,381	24.25	13.00
St. Johns	7,708	25.03	14.53
Santa Rosa	8,914	10.86	7.96
Sumter	5,308	20.72	9.15
Suwannee	12,544	16.10	9.01
Taylor	3,062	9.14	5.22
Volusia	11,480	17.30	9.66
Wakulla	3,700	20.01	4.59
Walton	7,962	15.69	7.53
Washington	7,820	17.39	8.44
Whole State	464,639	15.50	11.67

CONSUMPTION.

Deaths from "Consumption" in Florida, for year ending December 31st, 1899, set forth by sex, color, nativity and length of residence in the State:

DEATHS 1899	White		Colored		AGE										NATIVITY					Length of residence in Florida					Total									
	M	F	M	F	1	2	3	4	5	10	20	30	40	50	60	70	80	90	100	Not Stated	Florida			Other States		Foreign	Cuba	Days	Weeks	Months	Years	Life	Not Stated	
																					Not Stated	Florida	Other States											
January	16	12	11	9	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	15	13	8	5	3	2	1	3	29	7	48		
February	15	10	8	4	2	2	1	1	10	14	7	2	...	1	7	16	11	9	2	3	...	1	1	4	9	13	11	37
March	21	8	5	6	3	1	...	...	...	1	13	6	2	6	...	...	...	...	...	8	14	19	2	2	3	2	...	...	...	5	16	11	40
April	16	9	12	13	3	1	1	7	9	9	1	8	17	15	3	7	2	18	14	16	50
May	9	5	8	11	1	1	2	...	8	7	9	1	4	4	16	11	1	1	1	12	14	6	33
June	8	7	12	8	3	...	1	...	...	...	8	9	10	2	2	...	...	...	...	15	8	9	4	...	...	...	...	...	1	9	8	16	35
July	8	6	14	13	1	...	...	...	1	...	13	14	6	1	3	2	1	...	...	5	21	9	2	1	...	...	...	...	1	2	20	10	41
August	4	8	13	19	4	...	...	...	...	...	10	21	3	5	...	...	...	...	...	9	24	12	2	1	...	...	...	...	...	13	22	9	44
September	7	4	14	4	...	...	...	...	2	...	4	11	5	4	2	1	...	...	...	2	14	12	1	...	...	...	...	...	2	10	11	6	29
October	17	4	9	12	1	...	...	...	...	...	7	16	5	2	2	...	...	...	...	2	17	14	5	...	...	...	...	...	1	13	17	11	42
November	12	11	9	12	7	...	...	...	...	...	2	9	11	9	3	2	1	...	...	12	17	2	3	...	...	...	...	...	1	12	15	16	44
December	15	13	9	10	5	...	...	...	...	3	7	15	10	4	2	1	...	...	...	6	25	12	2	...	...	...	...	...	1	2	25	10	47
Totals	149	97	124	121	32	1	2	...	4	10	108	150	92	41	31	13	1	84	204	146	36	20	3	5	22	157	177	126	490

DIAGRAM SHOWING THE RELATIVE MORTALITY FROM THE LEADING DANGEROUS DISEASES, YEAR 1899.



AGES OF DECEDENTS.

Ages of Decedents for year ending December 31st, 1899, based on mortality returns to the State Board of Health during said period.

	White		Colored.		Total
	M	F	M	F	
Under 1 year.....	339	247	243	188	1,017
Between 1 and 5.....	189	167	128	121	605
“ 5 and 10.....	86	77	38	34	235
“ 10 and 15.....	67	38	28	28	161
“ 15 and 20.....	44	62	51	51	218
“ 20 and 25.....	98	82	91	81	352
“ 25 and 30.....	77	76	90	85	328
“ 30 and 40.....	137	121	141	104	538
“ 40 and 50.....	169	94	117	83	463
“ 50 and 60.....	146	108	76	64	394
“ 60 and 70.....	172	114	53	53	392
“ 70 and 80.....	161	95	45	39	340
“ 80 and 90.....	63	54	19	19	155
“ 90 and 100.....	9	11	5	13	38
Over 100 years.....	1	0	5	4	10
Not stated.....	52	31	31	33	147
Totals.....	1,846	1,377	1,161	1,010	5,394

Average Age—White, 32.01; Colored, 26.98. Total, 27.49.

It will be noted that but seven deaths from yellow fever are credited to Dale county in the following table of "Causes of Deaths," while on page 88 of the report it appears that there were actually fourteen deaths at Miami from yellow fever. This apparent discrepancy is explained by the fact that during the yellow fever epidemic slight attention was given by the doctors to the making of statistical reports, and thus seven death reports from that community were overlooked, and do not appear in this table of deaths.

Causes of Death During the Year 1899.

Mortality Report of the State of Florida, Classified by Counties and Diseases. Mortality Returns made direct to Office of State Board of Health by Attending Physicians, Nurses, Coroners and Heads of Families.
Population Figures (1895) State Census.

*The cities of Jacksonville and Ocala are not included it will be observed, in their respective counties, but are reported separately. Key West is virtually the whole of Monroe County.

POPULATION.		DISEASE.		POPULATION.		DISEASE.		POPULATION.		DISEASE.	
38,207	3,712	Alachua.	1	38,207	3,712	Alachua.	1	38,207	3,712	Alachua.	1
9,499	4,558	Baker.	1	9,499	4,558	Baker.	1	9,499	4,558	Baker.	1
3,275	4,205	Bradford.	1	3,275	4,205	Bradford.	1	3,275	4,205	Bradford.	1
5,209	12,685	Brevard.	1	5,209	12,685	Brevard.	1	5,209	12,685	Brevard.	1
6,412	34,706	Calhoun.	1	6,412	34,706	Calhoun.	1	6,412	34,706	Calhoun.	1
22,066	4,457	Chloris.	1	22,066	4,457	Chloris.	1	22,066	4,457	Chloris.	1
13,698	9,499	Clay.	1	13,698	9,499	Clay.	1	13,698	9,499	Clay.	1
2,140	31,362	Columbia.	1	2,140	31,362	Columbia.	1	2,140	31,362	Columbia.	1
6,232	21,850	Dade.	1	6,232	21,850	Dade.	1	6,232	21,850	Dade.	1
15,007	3,783	DeSoto.	1	15,007	3,783	DeSoto.	1	15,007	3,783	DeSoto.	1
8,406	2,225	Duval.	1	8,406	2,225	Duval.	1	8,406	2,225	Duval.	1
19,397	7,534	Escambia.*	1	19,397	7,534	Escambia.*	1	19,397	7,534	Escambia.*	1
2,079	13,009	Franklin.	1	2,079	13,009	Franklin.	1	2,079	13,009	Franklin.	1
3,880	21,850	Gadsden.	1	3,880	21,850	Gadsden.	1	3,880	21,850	Gadsden.	1
21,850	17,161	Hamilton.	1	21,850	17,161	Hamilton.	1	21,850	17,161	Hamilton.	1
17,161	8,816	Hernando.	1	17,161	8,816	Hernando.	1	17,161	8,816	Hernando.	1
8,816	12,450	Jefferson.	1	8,816	12,450	Jefferson.	1	8,816	12,450	Jefferson.	1
12,450	3,394	Lake.	1	12,450	3,394	Lake.	1	12,450	3,394	Lake.	1
3,394	4,097	Lee.	1	3,394	4,097	Lee.	1	3,394	4,097	Lee.	1
10,083	11,381	Leon.	1	10,083	11,381	Leon.	1	10,083	11,381	Leon.	1
11,381	7,008	Liberty.	1	11,381	7,008	Liberty.	1	11,381	7,008	Liberty.	1
7,008	5,308	Madison.	1	7,008	5,308	Madison.	1	7,008	5,308	Madison.	1
5,308	12,514	Mammoth.	1	5,308	12,514	Mammoth.	1	5,308	12,514	Mammoth.	1
12,514	3,163	Marion.	1	12,514	3,163	Marion.	1	12,514	3,163	Marion.	1
3,163	11,481	Monroe.*	1	3,163	11,481	Monroe.*	1	3,163	11,481	Monroe.*	1
11,481	3,700	Nassau.	1	11,481	3,700	Nassau.	1	11,481	3,700	Nassau.	1
3,700	7,902	Orange.	1	3,700	7,902	Orange.	1	3,700	7,902	Orange.	1
7,902	5,800	Osceola.	1	7,902	5,800	Osceola.	1	7,902	5,800	Osceola.	1
5,800	1,750	Pasco.	1	5,800	1,750	Pasco.	1	5,800	1,750	Pasco.	1
1,750	1,750	Polk.	1	1,750	1,750	Polk.	1	1,750	1,750	Polk.	1
1,750	1,750	Putnam.	1	1,750	1,750	Putnam.	1	1,750	1,750	Putnam.	1
1,750	1,750	St. Johns.	1	1,750	1,750	St. Johns.	1	1,750	1,750	St. Johns.	1
1,750	1,750	St. Louis.	1	1,750	1,750	St. Louis.	1	1,750	1,750	St. Louis.	1
1,750	1,750	St. Rose.	1	1,750	1,750	St. Rose.	1	1,750	1,750	St. Rose.	1
1,750	1,750	St. Vincent.	1	1,750	1,750	St. Vincent.	1	1,750	1,750	St. Vincent.	1
1,750	1,750	St. James.	1	1,750	1,750	St. James.	1	1,750	1,750	St. James.	1
1,750	1,750	St. George.	1	1,750	1,750	St. George.	1	1,750	1,750	St. George.	1
1,750	1,750	St. Andrew.	1	1,750	1,750	St. Andrew.	1	1,750	1,750	St. Andrew.	1
1,750	1,750	St. Nicholas.	1	1,750	1,750	St. Nicholas.	1	1,750	1,750	St. Nicholas.	1
1,750	1,750	St. Paul.	1	1,750	1,750	St. Paul.	1	1,750	1,750	St. Paul.	1
1,750	1,750	St. Peter.	1	1,750	1,750	St. Peter.	1	1,750	1,750	St. Peter.	1
1,750	1,750	St. Anthony.	1	1,750	1,750	St. Anthony.	1	1,750	1,750	St. Anthony.	1
1,750	1,750	St. Francis.	1	1,750	1,750	St. Francis.	1	1,750	1,750	St. Francis.	1
1,750	1,750	St. Margaret.	1	1,750	1,750	St. Margaret.	1	1,750	1,750	St. Margaret.	1
1,750	1,750	St. Elizabeth.	1	1,750	1,750	St. Elizabeth.	1	1,750	1,750	St. Elizabeth.	1
1,750	1,750	St. Ann.	1	1,750	1,750	St. Ann.	1	1,750	1,750	St. Ann.	1
1,750	1,750	St. Clare.	1	1,750	1,750	St. Clare.	1	1,750	1,750	St. Clare.	1
1,750	1,750	St. Agnes.	1	1,750	1,750	St. Agnes.	1	1,750	1,750	St. Agnes.	1
1,750	1,750	St. Cecilia.	1	1,750	1,750	St. Cecilia.	1	1,750	1,750	St. Cecilia.	1
1,750	1,750	St. Barbara.	1	1,750	1,750	St. Barbara.	1	1,750	1,750	St. Barbara.	1
1,750	1,750	St. Ursula.	1	1,750	1,750	St. Ursula.	1	1,750	1,750	St. Ursula.	1
1,750	1,750	St. Brigid.	1	1,750	1,750	St. Brigid.	1	1,750	1,750	St. Brigid.	1
1,750	1,750	St. Katerine.	1	1,750	1,750	St. Katerine.	1	1,750	1,750	St. Katerine.	1
1,750	1,750	St. Agatha.	1	1,750	1,750	St. Agatha.	1	1,750	1,750	St. Agatha.	1
1,750	1,750	St. Chelita.	1	1,750	1,750	St. Chelita.	1	1,750	1,750	St. Chelita.	1
1,750	1,750	St. Rita.	1	1,750	1,750	St. Rita.	1	1,750	1,750	St. Rita.	1
1,750	1,750	St. Thelma.	1	1,750	1,750	St. Thelma.	1	1,750	1,750	St. Thelma.	1
1,750	1,750	St. Bernadette.	1	1,750	1,750	St. Bernadette.	1	1,750	1,750	St. Bernadette.	1
1,750	1,750	St. Rose Lorraine.	1	1,750	1,750	St. Rose Lorraine.	1	1,750	1,750	St. Rose Lorraine.	1
1,750	1,750	St. Gertrude.	1	1,750	1,750	St. Gertrude.	1	1,750	1,750	St. Gertrude.	1
1,750	1,750	St. Clare of Assisi.	1	1,750	1,750	St. Clare of Assisi.	1	1,750	1,750	St. Clare of Assisi.	1
1,750	1,750	St. Elizabeth of Hungary.	1	1,750	1,750	St. Elizabeth of Hungary.	1	1,750	1,750	St. Elizabeth of Hungary.	1
1,750	1,750	St. Ann of Cologne.	1	1,750	1,750	St. Ann of Cologne.	1	1,750	1,750	St. Ann of Cologne.	1
1,750	1,750	St. Catherine of Siena.	1	1,750	1,750	St. Catherine of Siena.	1	1,750	1,750	St. Catherine of Siena.	1
1,750	1,750	St. Agnes of Rome.	1	1,750	1,750	St. Agnes of Rome.	1	1,750	1,750	St. Agnes of Rome.	1
1,750	1,750	St. Cecilia of Rome.	1	1,750	1,750	St. Cecilia of Rome.	1	1,750	1,750	St. Cecilia of Rome.	1
1,750	1,750	St. Barbara of Nicomedia.	1	1,750	1,750	St. Barbara of Nicomedia.	1	1,750	1,750	St. Barbara of Nicomedia.	1
1,750	1,750	St. Ursula of Britain.	1	1,750	1,750	St. Ursula of Britain.	1	1,750	1,750	St. Ursula of Britain.	1
1,750	1,750	St. Brigid of Ireland.	1	1,750	1,750	St. Brigid of Ireland.	1	1,750	1,750	St. Brigid of Ireland.	1
1,750	1,750	St. Katerine of Alexandria.	1	1,750	1,750	St. Katerine of Alexandria.	1	1,750	1,750	St. Katerine of Alexandria.	1
1,750	1,750	St. Agatha of Sicily.	1	1,750	1,750	St. Agatha of Sicily.	1	1,750	1,750	St. Agatha of Sicily.	1
1,750	1,750	St. Chelita of Italy.	1	1,750	1,750	St. Chelita of Italy.	1	1,750	1,750	St. Chelita of Italy.	1
1,750	1,750	St. Rita of Capua.	1	1,750	1,750	St. Rita of Capua.	1	1,750	1,750	St. Rita of Capua.	1
1,750	1,750	St. Thelma of Hungary.	1	1,750	1,750	St. Thelma of Hungary.	1	1,750	1,750	St. Thelma of Hungary.	1
1,750	1,750	St. Bernadette of Lourdes.	1	1,750	1,750	St. Bernadette of Lourdes.	1	1,750	1,750	St. Bernadette of Lourdes.	1
1,750	1,750	St. Rose Lorraine of France.	1	1,750	1,750	St. Rose Lorraine of France.	1	1,750	1,750	St. Rose Lorraine of France.	1
1,750	1,750	St. Gertrude of Belgium.	1	1,750	1,750	St. Gertrude of Belgium.	1	1,750	1,750	St. Gertrude of Belgium.	1
1,750	1,750	St. Clare of Montefalco.	1	1,750	1,750	St. Clare of Montefalco.	1	1,750	1,750	St. Clare of Montefalco.	1
1,750	1,750	St. Elizabeth of Portugal.	1	1,750	1,750	St. Elizabeth of Portugal.	1	1,750	1,750	St. Elizabeth of Portugal.	1
1,750	1,750	St. Ann of Visconti.	1	1,750	1,750	St. Ann of Visconti.	1	1,750	1,750	St. Ann of Visconti.	1
1,750	1,750	St. Catherine of Genoa.	1	1,750	1,750	St. Catherine of Genoa.	1	1,750	1,750	St. Catherine of Genoa.	1
1,750	1,750	St. Agnes of Viterbo.	1	1,750	1,750	St. Agnes of Viterbo.	1	1,750	1,750	St. Agnes of Viterbo.	1
1,750	1,750	St. Cecilia of Trani.	1	1,750	1,750	St. Cecilia of Trani.	1	1,750	1,750	St. Cecilia of Trani.	1
1,750	1,750	St. Barbara of Troy.	1	1,750	1,750	St. Barbara of Troy.	1	1,750	1,750	St. Barbara of Troy.	1
1,750	1,750	St. Ursula of Cologne.	1	1,750	1,750	St. Ursula of Cologne.	1	1,750	1,750	St. Ursula of Cologne.	1
1,750	1,750	St. Brigid of Kildare.	1	1,750	1,750	St. Brigid of Kildare.	1	1,750	1,750	St. Brigid of Kildare.	1
1,750	1,750	St. Katerine of Mount Sinai.	1	1,750	1,750	St. Katerine of Mount Sinai.	1	1,750	1,750	St. Katerine of Mount Sinai.	1
1,750	1,750	St. Agatha of Catania.	1	1,750	1,750	St. Agatha of Catania.	1	1,750	1,750	St. Agatha of Catania.	1
1,750	1,750	St. Chelita of Sicily.	1	1,750	1,750	St. Chelita of Sicily.	1	1,750	1,750	St. Chelita of Sicily.	1
1,750	1,750	St. Rita of Aviano.	1	1,750	1,750	St. Rita of Aviano.	1	1,750	1,750	St. Rita of Aviano.	1
1,750	1,750	St. Thelma of Hungary.	1	1,750	1,750	St. Thelma of Hungary.	1	1,750	1,750	St. Thelma of Hungary.	1
1,750	1,750	St. Bernadette of Lourdes.	1	1,750	1,750	St. Bernadette of Lourdes.	1	1,750	1,750	St. Bernadette of Lourdes.	1
1,750	1,750	St. Rose Lorraine of France.	1	1,750	1,750	St. Rose Lorraine of France.	1	1,750	1,750	St. Rose Lorraine of France.	1
1,750	1,750	St. Gertrude of Belgium.	1	1,750	1,750	St. Gertrude of Belgium.	1	1,750	1,750	St. Gertrude of Belgium.	1
1,750	1,750	St. Clare of Montefalco.	1	1,750	1,750	St. Clare of Montefalco.	1	1,750	1,750	St. Clare of Montefalco.	1
1,750	1,750	St. Elizabeth of Portugal.	1	1,750	1,750	St. Elizabeth of Portugal.	1	1,750	1,750	St. Elizabeth of Portugal.	1
1,750	1,750	St. Ann of Visconti.	1	1,750	1,750	St. Ann of Visconti.	1	1,750	1,750	St. Ann of Visconti.	1
1,750	1,750	St. Catherine of Genoa.	1	1,750	1,750	St. Catherine of Genoa.	1	1,750	1,750	St. Catherine of Genoa.	1
1,750	1,750	St. Agnes of Viterbo.	1	1,750	1,750	St. Agnes of Viterbo.	1	1,750	1,750	St. Agnes of Viterbo.	1
1,750	1,750	St. Cecilia of Trani.	1	1,750	1,750	St. Cecilia of Trani.	1	1,750	1,750	St. Cecilia of Trani.	1
1,750	1,750	St. Barbara of Troy.	1	1,750	1,750	St. Barbara of Troy.	1	1,750	1,750	St. Barbara of Troy.	1
1,750	1,750	St. Ursula of Cologne.	1	1,750	1,750	St. Ursula of Cologne.	1	1,750	1,750	St. Ursula of Cologne.	1
1,750	1,750	St. Brigid of Kildare.	1	1,750	1,750	St. Brigid of Kildare.	1	1,750	1,750	St. Brigid of Kildare.	1
1,750	1,750	St. Katerine of Mount Sinai.	1	1,750	1,750	St. Katerine of Mount Sinai.	1	1,750	1,750	St. Katerine of Mount Sinai.	1
1,750	1,750	St. Agatha of Catania.	1	1,750	1,750	St. Agatha of Catania.	1	1,750	1,750	St. Agatha of Catania.	1
1,750	1,750	St. Chelita of Sicily.	1	1,750	1,750	St. Chelita of Sicily.	1	1,750	1,750	St. Chelita of Sicily.	1
1,750	1,750	St. Rita of Aviano.	1	1,750	1,750	St. Rita of Aviano.	1	1,750	1,750	St. Rita of Aviano.	1
1,750	1,750	St. Thelma of Hungary.	1	1,750	1,750	St. Thelma of Hungary.	1	1,750	1,750	St. Thelma of Hungary.	1
1,750	1,750	St. Bernadette of Lourdes.	1	1,750	1,750	St. Bernadette of Lourdes.	1	1,750	1,750	St. Bernadette of Lourdes.	1
1,750	1,750	St. Rose Lorraine of France.	1	1,750	1,750	St. Rose Lorraine of France.	1	1,750	1,750	St. Rose Lorraine of France.	1
1,750	1,750	St. Gertrude of Belgium.	1	1,750	1,750	St. Gertrude of Belgium.	1	1,750	1,750		

CITY OF NEW YORK. }
 COUNTY OF NEW YORK. } ss.
 STATE OF NEW YORK. }

Mortimer Falk, being duly sworn, says:

I. That in the month of September last, at the time the yellow fever epidemic was at Key West, I had occasion to go to Havana, which necessitated my applying for an Immune Certificate from the State Board of Health of Florida, on account of Havana being quarantined against Key West. The State Board of Health of Florida issued the said certificate to me, being aware of the fact that I was an immune, having resided in the Tropics for a number of years, and having had yellow fever, so I had no difficulty in entering Havana.

II. Upon my return from Havana to Key West it was again necessary for me to get an Immune Certificate, from the Marine Hospital Service in Havana, Key West being quarantined against Havana, so I applied at the office of the Marine Hospital Service, and there was a Dr. Dudley, whom I requested to furnish me with the necessary certificate. His question to me was, "How do I know you are an immune?" I informed him that I had arrived from Key West on the boat previous, and that he was in possession of my Immune Certificate, issued by the State Board of Health of Florida. He sent for my certificate and informed me that it was not worth the paper it was written on, as he claimed that the certificate issued by the State Board of Health of Florida was no good, and emphatically refused to issue me a certificate on this. I thought, and told him, that this was rather strange, but nevertheless I was fortunate enough to be registered by Dr. Burgess, in his record, as being an immune, having had yellow fever, and Dr. Burgess being in possession of my certificate, Dr. Dudley then informed me that Dr. Burgess was as bad as the State Board of Health of Florida, and could be bought for five dollars. I was surprised at such a remark from one physician against another, and so informed him.

III. He refused to give me a certificate on my registration, but after considerable difficulty he consented to allow me to return to Key West, with the remark, if they will allow you to come back to Havana out of that infested port, he would allow me to return, but that he would not allow me, or issue me a certificate to go to any other port. I then informed him that Key West was just as far as I wanted to go at that time. He then informed me that he would make a cross in red ink against

my name, as a suspicious person. He was so ungentlemanly in his actions that I informed him to put a red line through my name if he cared to, as it made no difference to me. The red mark can be found in Dr. Burgess' registration book against my name. I have been traveling from the port of Havana during all quarantine restrictions for at least eight years, and I certainly was very much put out at the treatment accorded me by the said Dr. Dudley, as I gave him full proof that I was entitled to travel at all times during quarantine restrictions.

Sworn to before me this 6th day of June, 1900.

(Signed) Jos. M. MALAMENT,
Notary Public, King's County.

Certificate filed in New York County.

JACKSONVILLE, FLA., August 30, 1899.

DEAR SIR—In view of your personal and official relations with the State Board of Health of Florida, you are informed that I have recently seen a number of cases of dengue at Miami, Dade county, Florida, where there have been some sixty or eighty cases. No deaths. I am to-day advised that disease has appeared at Key West. In view of the fact that the public regard dengue with so much suspicion, you will please regard this information and confidential. My object in advising you concerning the appearance of this malady is to put you on your guard, and allay any uneasiness which might arise should you have cases in your community. It is very probable that it will shortly extend itself to other parts of the State. Please advise me at once on its appearance in your section.

Very truly,
(Signed) JOSEPH Y. PORTER,
State Health Officer.

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